APPLIED CANCER RESEARCH
SUPPLEMENT

Number 1 August 2005

CONTENTS

DEPARTMENTS

APPLIED CANCER RESEARCH

RULES FOR PUBLICATION

The Applied Cancer Research (ACR) is a comprehensive oncology journal that publishes original articles, case reports, historical articles, editorial comments and reviews focusing on each aspect of cancer research, including biology, epidemiology, pathology, diagnosis and treatment (medical, pediatrics, radiation and surgical oncology). Oncology nursing and palliative care articles are also published. Every original article undergoes peer review.

The ACR accepts originals article and case reports on the following areas of oncology: molecular biology, genetics, pathology, head and neck, lung, breast, gastrointestinal tract, genitourinary tract, and skin cancers, endocrine tumors, neurology, gynecology, pediatrics, radiotherapy, clinical oncology, ethics, clinical studies, nursing, rehabilitation and support.

Besides the original articles and case reports, other sections of ACR include: editorial, historical article, letters to the editor, and reviews. Editorials are related to published articles in the same journal number or on subject of interest. Letters to the Editor must refer to published articles in the two last journal numbers, always with the right to reply. Experts will be invited to elaborate review articles on subjects of interest.

The decision to publish or not the manuscript is made by the Editorial Council, Associated Editors, and Editor-in-Chief.

The ACR is published by Tecmedd Editor on acid-free paper.

Instructions to the Authors

Manuscripts submitted to publication must be sent to:

Benedito Mauro Rossi, MD, PhD
Editor-in-Chief
Applied Cancer Research
A.C. Camargo Cancer Hospital
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01509-010 - São Paulo, Brazil

The manuscripts must follow the recommendations of the International Committee of Medical Journal Editors – Uniform Requirement for Manuscripts Submitted to Biomedical Journals: writing and editing for biomedical publications, available at URL:http://www.icmje.org.

Type of Manuscripts

Original article

Case report: maximum of 1000 words, 3 illustrations and 6 citations. The number of authors must be limited to 5. Abstract shall not be included.

Letter to the editor: It must be related to articles published in the 2 last numbers of the Journal and it must have less than 500 words and 3 authors.

Review: only by Journal Editorial Council invitation.

Ethical Considerations on the Research Development and Reporting

According to the International Committee of Medical Journals Editors, author is considered the individual that: (1) has contributed substantially to the conception, data acquisition, analysis, and interpretation; (2) has participated in the manuscript elaboration and has approved the final version.

In cases of a multicentered group study, individuals with direct responsibility for the manuscript must be identified, and they must fulfill the authorship criteria above described. When submitting the manuscript, the corresponding author must indicate the preferred citation and identify all the authors as well as the group name.

Attainment of financial support, data collection or general research group supervision does not justify the authorship. Each author must take on public responsibility for the content.

Acknowledgements

Every individual that has contributed with the research elaboration but do not fulfill the authorship criteria must be listed in the acknowledgement. Financial and material support must also be cited in this section.

Substantially contributing groups to the article,

without justifying authorship must be listed under the title of "clinical investigators" or "participating investigators" and their function has to be described: "revised critically the article", "collect data", "has offered and took care of patients under study".

Patient privacy and confidentiality

Patients have the right to privacy that cannot be infringed without signed informed consent. Identifying information, including name initials and/or hospital registers must not be published, unless essential and with patient signed consent. It is necessary to report that the participants consent was obtained.

Protection to the subjects of the research

The authors must guarantee the procedures were conducted according to the ethical principles, national legislation and Helsinki Declaration (revised in 2000). The research must be approved by the Institution's Ethical Committee where it has been developed.

Requirements for Manuscript Submission

The articles must be preferably written in English (articles in Portuguese will be accepted with a translation fee), submitted in two printed copies containing submission letter, title page, abstract, text, references, figures and tables. The text must be typed in MS Word®, double space, Times New Roman, 12 pt, in A4 (210x297 mm), with 3 cm margin. It must be annexed to the manuscript: CD or floppy disk with the title page, abstract, text, references, figures and tables. Figures must be in TIFF or EPS format.

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The submission letter with the corresponding author signature in it must accompany the manuscript. In this letter, it must be stated that the article has not been previously published or currently submitted to other journal; each author has contributed to the manuscript elaboration and has approved its content; the authors guarantee originality and validity of the article or case report; and there is no financial interest in the publication. Any financial source other than that from the institution must also be specified.

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The formulary must signed by each author after the acceptance confirmation of the article.

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The title page must contain the following information:

Title of the article;
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Number of figures and tables.

Abstract and Keywords

The abstract must be presented after the front page and must contain the following sections: Objectives, Material and Methods, Results, and Conclusions.

It must be limited to 250 words.

After abstract, it must be listed 3 to 7 keywords from the Medical Subject Heading (MeSH) in the Index Medicus list.

Text body – original article

The article must contain the following section: introduction, material and methods, results, and discussion.

Introduction

Expose the essence of the study and supply only pertinent references, without reviewing extensively the subject. Expose clearly the study purpose.

Material and Methods

Describe clearly the selection of the subjects (patients or animals, including controls). Identify in detail the methods, equipments, and procedures to allow others to reproduce the study.

Supply reference of the method, including statistical tests.

Results

Present the results in a logical sequence in the text, tables and figures. Do not repeat in the text data presented in the tables or figures.

Discussion

Emphasize new and important aspect of the study. Do not repeat in detail data presented in the *Results*. Include in the discussion the implication of the findings and their limitations.

References

The reference model follows the Vancouver Style (available at URL: http://www.libary.uq.edu.au/training/citation/vancouv.html) and must be presented in separate page after the conclusion. References must be cited in order of appearance in the text and the citation in the text must be *subscribed*.

Personal communication, not published in observations, submitted manuscript should not be cited. Accepted but not published articles can be listed as "in press".

Book

The elements that constitute the reference of a book are: author (listed the surname, space, capital initials, without punctuation between initials); title of publication; edition (from the second edition, abbreviate the word "edition" to "ed."); local of publication (the city name, ";" , one space); editor (editor's full name, followed by ";" and space); year of publication (after, introduce "." and one space if the number of pages is added).

Cite full name of all authors if six or less. Book with seven or more authors, cite the first six and then add "*et al.*" Include comma and one space between names. After the last author add "." after the last initial.

Example:

Lodish H, Baltimore D, Berk A, Zipursky SL, Matsudaira P, Darnell J. Molecular cell biology. 3rd ed. New York: Scientific American; 1995.

Book chapter: Porter RJ, Meldrum BS. Antiepileptic drugs. In: Katzung BG, editor. Basic and clinical pharmacology. 6th ed. Norwalk: Appleton and Lange; 1995, p.361-80.

Articles

It must be included the following elements: authors name; article title; journal title (abbreviated according to Medline style). The abbreviations list can be found in URL: http://www.nlm.nih.gov (do not punctuate the abbreviation and add one space after journal name); year of the publication (";" after without space); volume (add the number in parenthesis, if necessary, followed by ":" without space); initial and final numbers (do not repeat numbers, after add ".").

Example:

Russel FD, Coppel AL, Davenport AP. In vitro enzymatic processing of radiolabelled big ET-1 in human kidney as a food ingredient. Biochem Pharmacol 1998;55;697-701.

Internet Site

Utilize the following format: author ("." after the last author, one space); title ("." followed one space); year (if applicable, add ";"); number of pages in parenthesis ("." one space); available at ("," followed by one space); URL ("." one space); accessed (add month, day, year and ".").

Example:

Health on the net foundation. Health on the net foundation code of conduct (HONcode) for medical and health web sites. Available at: URL: http://hon.ch/Conduct.html. Accessed June 30, 1998.

Tables

Tables must be presented after the references in separate pages and consecutively numbered, in Arabic Numerals in order of citation in the text. The table number must be followed by a brief description. Neither horizontal nor vertical lines should be used. All the non-standardized abbreviations must be described at the end of the table. Permission to reproduce any previously published material must be obtained.

Figures and legends

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Digital figures will be accepted in TIFF or EPS format, with the minimum resolution of 300 dpi. Drawings must be sent in the same format above but with minimum resolution of 600 dpi. Each figure and digital drawing must be accompanied by two printed copies.

EDITORIAL

Members of the Brazilian Melanoma Group (GBM) have made a great deal of effort to spread knowledge on the field of melanocytic lesions. As a multidisciplinary and multi-institutional study group, it has been a duty to envisage the multiple aspects of this dreadful neoplasia that, as of today's knowledge, has very few effective treatment options once systemic spreading have been detected. Thus, it is always important to emphasize the need to seek a better understanding of this disease.

One of the highlights of GBM is the Brazilian Conference, held every two years, and for the first time in Salvador, Bahia, having as president Dr. Miguel Brandão. This is meant to unite different specialty professionals, including dermatologists, oncologists, surgeons, pathologists, radiotherapists, image and nuclear medicine specialists, plastic surgeons, psico-oncologists and scientists, among others.

This year we will be pleased to have as guest speakers, Drs. John Francis Thompson and Scott Menzies, both from Australia, as well as Dr. Takami Sato, from USA, that are most experienced in melanoma knowledge. Not to mention that our very best brazilian team will be presenting their own experience, either through lectures and pre-conference courses.

Over the last years, it became clear that the GBM needed to report research abstracts other than in a meeting brochure. In the fifth Brazilian Melanoma Conference, we were pleased to publish all abstracts in the Acta Oncológica Brasileira, indexed in the Latin American literature database, LILACS. This year, the journal has modified its format and renamed itself as Applied Cancer Research, aiming to better spread knowledge by adopting English as main language for submitted articles. The editorial board graciously agreed to publish all reviewed abstracts from this VI Brazilian Melanoma Conference, as a supplement, for which we are grateful.

This year (2005), 48 abstracts were selected and accepted, after being reviewed by a scientific board. Going through the abstracts, one must notice that according to latitude, melanoma types vary, and a higher frequency of acral melanoma in the northeast region as compared to south and south east is seen, a clear indication of ethnic variation in our continental country. There are also some interesting reports on vaccines, prognostic factors and molecular biology. The experience with sentinel lymph node has increased since last conference and we believe the learning curve has attained a plateau. However one must always emphasize that this technique is dependent upon serial sectioning and through scanning of the entire lymph node, a very patient work that rely on pathologist's expertise.

As guest-editor, I must thank Applied Cancer Research editorial board for inviting me as a representative of GBM, this multidisciplinary study group that I have the honor to chair. Thanks to all GBM executive board and comitees for the imput and effort to conduct this study group.

Gilles Landman, M.D., PhD.
Guest-Editor and
President of the Brazilian Melanoma Group (GBM)
Email: gbm@gbm.org.br
Site: www.gbm.org.br

IV Brazilian Melanoma Conference

GBM
Brazilian Melanoma Group

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PROGRAM

08/18/2005 THURSDAY

08:00 am to 11:30 am
Room B - Pre Conference Course
Melanocytic Nevu
Coordinator: Fernando Augusto de Almeida
Coordinator: Marcus Maia
Coordinator: Jussamara Brito Santos
Secretary: Sandra Maria Guerra da Rocha

08:00 am to 08:20 am: Nevus X Melanoma: Histopathologic Barrier
Gilles Landman

08:20 am to 08:40 am: Congenital Melanocytic Nevus and its relationship with the Melanoma
Jussamara Brito Santos

08:40 am to 09:00 am: Blue Nevus; Reed Nevus; Halo Nevus
Fernando Augusto de Almeida

09:00 am to 09:20 am: Atypical Isolated and Multiple Nevus : How to manage them
Guilherme Olavo Olsen de Almeida

09:20 am to 09:40 am:Total Cutaneous Mapping in Multiple Melanocytic Nevus Follow Up
Marcus Maia

09:40 am to 10:00 am: How to Manage Longitudinal Melanonychia
Mauro Yoshiaki Enokihara

10:00 am to 10:30 am: Break

10:30 am to 11:30 am: Presentation and Debate on Uncommon Pigmented Nevus

08:00 am 12:00 am
Room A - Pre-Conference Course
Basic Dermoscopy
Coordinator: Gisele Gargantini Rezze
Coordinator: Sérgio Yamada
Coordinator: Bianca Costa Soares de Sá

08:00 am to 08:20 am: Introduction and Dermoscopic Criteria
Gisele Gargantini Rezze

08:20 am to 09:00 am: Analysis of Melanocytic and Non –Melanocytic Lesion Standards
Bianca Costa Soares de Sá

09:00 am to 09:20 am: Face Dermoscopy
Mauricio Mendonça do Nascimento

09:20 am to 09:40 am: Ungual Apparatus Dermoscopy
Sérgio Henrique Hirata

09:40 am to 10:00 am : Atypical Nevus Dermoscopy
Sérgio Yamada

10:00 am to 10:15 am: Break

10:15 am to 10:30 am: Cutaneous Melanoma Dermoscopy
Gisele Gargantini Rezze

10:30 am to 12:00 am: Exercises

08:00 am to 12:00 am
Room C - Pre Conference Course
Basic Approach: Diagnosis, Staging and Tretament of Melanoma

08:00 am to 08:10 am: Presentation
Robson Freitas de Moura

08:10 am to 08:45 am: Epidemiology and Clinical Diagnosis
Mauro Yoshiaki Enokihara

08:45 am to 09:20 am: Treatment of Primary Melanoma
Robson Freitas de Moura

09:20 am to 10:00 am: Loco-regional Therapy
Francisco Aparecido Belfort

10:00 am to 10:20 am: Break

10:20 am to 10:40 am: Adjuvant Therapy
Vanessa Dybal Bertoni

10:40 am to 11:00 am: Metastatic Disease Treatment
Nivaldo Farias

11:00 am to 11:20 am: Debate

11:20 am to 12:00 am: Case Presentation
Robson Freitas de Moura
Francisco Aparecido Belfort
Mauro Yoshiaki Enokihara
Gerson Junqueira Júnior
Nivaldo Farias
Vanessa Dybal Bertorni

08:30 am to 12:00 am
Room D - Pre Conference Course
Dermopathology

08:30 am to 09:00 am: Atypical Nevus / Spitz Nevus / Pigmented Spindle Cell Nevus
Mariangela Esther Alencar Marques

09:00 am to 09:30 am: Subungual Melanocytic Lesions
Nilceo Schwery Michalany

09:30 am to 10:00 am :Blue Nevus and Giant Congenital Nevus
Achiléa Lisboa Bittencourt

10:00 am to 10:30 am: Break

10:30 am to 11:00 am: Special Types of Melanoma
Gilles Landman

11:00 am to 11:10 am: Sentinel Lymph Node
Gilles Landman

11:10 am to 12:00 am: Presentation of Debates on previously received cases
Nilceo Schwery Michalany
Achiléa Lisboa Bittencourt
Juan Piñeiro Maceira
Luiz Antônio Rodrigues de Freitas
Mariangela Esther Alencar Marques

12:00 am to 2:00 pm: Lunch Break

2:00 pm to 6:00 pm
Room A - Pre Conference Course - Advanced Dermoscopy
Coordinator: Reinaldo de Faria Lima
Coordinator: Miguel Ângelo Rodrigues Brandão
Secretary: Eliene Portugal

2:00 pm to 4:00 pm: Dermoscopy of Pigmented Skin Lesions
Scott Menzies

4:00 pm to 4:30 pm: Break

4:30 pm to 5:00 pm: Digital Monitoring of Pigmented Skin Lesions
Scott Menzies

5:00 pm to 6:00 pm: Dermoscopy Quiz
Scott Menzies

08/19/2005 Friday

08:30 am to 09:10 am: Room A - Conference Melanoma in the State of Bahia
President: Lair Barbosa de Castro Ribeiro
Secretary: Constança Pithon Pereira
Conferencist: Miguel Ângelo Rodrigues Brandão

09:15 am to 09:40 am: Room A - Conference Populational Studies
President: Paulo Roberto Lima Machado
Secretary: Fernando Filardi Alves Souza
Conferencist: Lúcio Bakos

09:45 am to 10:30 am: Room A - Melanoma in Brazil
Moderator: Rogério Izar Neves
Secretary: Newton Sales Guimarães

09:45 am to 10:05 am: Lymph Node Sentinel in Brazil
Francisco Aparecido Belfort

10:05 am to 10:25 am: Complete Protocol of the Brazilian Melanoma Registrat
Eduard René Brechtbühl

10:25 am to 10:30 am: Debate

10:35 am to 11:00 am: Break for posters and exhibition visits

11:00 am to 12:20 pm
Room A – Round Table: Acral Melanoma
Moderator: Eduard René Brechtbühl
Moderator: Marcus Maia
Secretary: Leila Sarno

11:00 am to 11:15 am: Longitudinal Melanonychia and Melanoma
Mauro Yoshiaki Enokihara

11:15 am to 11:30 am: Matrix Direct Dermoscopy and Ungual Bed
Sérgio Henrique Hirata

11:30 am to 11:45 am: Pathology
Helenemarie Schaer Barbosa

11:45 am to 12:00 am: Surgery
Robson Freitas de Moura

12:00 am to 12:20 pm: Debate

12:20 pm to 2:00 pm: Lunch Break

2:00 pm to 3:25 pm
Room A – Round Table Melanocytic Nevus
Moderator: José Antônio Sanchez Jr
Moderator: Fernando Augusto de Almeida
Secretary: Bruno de Santana Silva

2:00 pm to 2:15 pm: Prevention
Jussamara Brito Santos

2:15 pm to 2:30 pm: Atypical and Congenital Nevus
Flavia Bittencourt

2:30 pm to 2:45 pm: Face Lesions Dermoscopy
Maurício Mendonça do Nascimento

2:45 pm to 3:00 pm: Excision Indications
Ariene Paixão

3:00 pm to 3:25 pm: Debate

3:30 pm to 4:00 pm: Break for posters and exhibition visits

4:00 pm to 5:10 pm
Room A – Round Table: Research
Moderator: Neide Ferraz
Moderator: Hamilton Ometto Stolf
Secretary: Marcia Braga Esteves de Villemor Amaral

4:00 pm to 4:15 pm: Cellular Migration Modulation
Roger Chammas

4:15 pm to 4:30 pm: cDNA Microarray: Differential Gene Expression
Luiz Fernando Lima Reis

4:30 pm to 4:45 pm: Immune Response of the Melanoma: Murine Model
Elaine Guadelupe Rodrigues

4:45 pm to 5:00 pm: Spectroscopy
Reinaldo de Faria Lima

5:00 pm to 5:10 pm: Debate

5:15 pm to 6:00 pm: Room A - Conference
Automated Diagnostic Machines to diagnose primary melanoma: Solar Scan
President: Reinaldo de Faria Lima
Secretary: Osvaldo José De Pretto
Conferencist: Scott Menzies

08/20/2005 Saturday

08:00 am to 08:30 am: Room A - Conference
Melanoma Liver Metastasis Treatment
President: Eduardo Dias de Moraes
Secretary: Roberto Gurgel
Conferencist: Takami Sato

08:30 am to 09:10 am: Room A - Conference
New Indications for Sentinel Lymph Node Biopsy
President: Marcos F. Moraes
Secretary: Fabiano Torres
Conferencist: John Francis Thompson

09:15 am to 09:55 am
Room A – Plenary Session Selected Posters
Moderator: Alessandra Chaves
Secretary: Irene Spinola Chaves Pinto
Fernando Augusto de Almeida
Francisco Aparecido Belfort
José Antônio Sanchez Jr
Alpha-V-Beta3 Integrin Expression in Melanocytic Nevus and Cutaneous Melanoma
Clinical, Demographic and Histopathologic Evaluation of 529 Melanoma Diagnosed in the State of Bahia - Brazil
Prognostic Evaluation of Cutaneous Melanoma Patients With Lymph Node Micrometastasis Treated in the Instituto Nacional de Câncer (INCA)

10:00 am to 10:20 am: Room A – Conference PET-TC Changes in Therapeutic Management
President: Virgilina Fahel
Secretary: Fernanda Guimarães Fahel Rodrigues
Conferencist: José Soares Junior

10:20 am to 10:40 am: Break for posters and exhibition visits

10:40 am to 11:00 am: Room A – Conference
Psycho-Oncology
President: Sabrina Costa Figueira
Secretary: Ana Cristina Guerra de Oliveira e Sousa
Conferencist: Ingrid Maria Olsen de Almeida

11:05 am to 11:45 am: Room A – Conference
Adjuvance and Metastatic Melanoma Treatment
President: Carlos Sampaio Filho
Secretary: Geoval Pinto Lima
Conferencist: Antonio Carlos Buzaid

11:50 am to 12:30 pm:
Room A – Conference Advances in the Vaccines Program
President: Marcus Maia
Secretary: Silvânia Daghlia

11:50 am to 12:10 pm: Autologous Vaccines
Débora Castanheira Pereira da Silva

12:10 pm to 12:30 pm: Dendritic Cells Vaccines
José Alexandre M. Barbuto

12:30 pm to 2:00 pm: Lunch Break

2:00 pm to 2:55 pm
Room A - Panel Clear Your Doubts With the Experts
Moderator: Francisco Aparecido Belfort
Richard Karl Uwe Lange
João Pedreira Duprat Neto
Antonio Carlos Buzaid
Eduardo Miranda Brandão
Lucia Miiko Yojo de Carvalho
Hamilton Ometto Stolf
Maria de Lourdes Lopes
Achiléa Lisboa Bittencourt

3:00 am to 3:25 pm: Room A Conference Infusion and Perfusion in Melanoma
President: Roque Andrade
Secretary: Robson Freitas de Moura
Conferencist: John Francis Thompson

3:30 pm to 3:50 pm: Break for posters and exhibition visits

3:50 pm to 4:55 pm
Room A – Cases Debate Presentation of 5 Cases of Interest
Moderator: Ivan Dunshee de Abranches O. Santos
Presenter: Carlos Baptista Barcaui
Presenter: Arival de Brito
Presenter: Ivo Barreto de Medeiros
Presenter: Marcos Fraga Fortes
Presenter: Felice Riccardi
Commentator: Gerson Junqueira Júnior
Commentator: Sandro Martins
Commentator: Gabriel Gontijo
Commentator: Rogério Izar Neves
Commentator: Marcos F. Moraes

5:00 pm to 5:30 pm: Room A - Conference
Guidelines of the Brazilian Melanoma Group
President: Miguel Ângelo Rodrigues Brandão
Secretary: Vitoria Rego
Conferencist: Gilles Landman

5:30 pm to 6:30 pm: Room A - General Assembly

MEETING ABSTRACTS

P-01

Acral Melanoma in Causasians: Clinical Features, Histopathology and Tumor Thickness on Diagnosis

Felice Riccardi, Antonio Nocchi Kalil, Maria Carolina Widholzer Rey, Antonio Dal Pizzol Junior, Roque Furian, Alexei Peter dos Santos, Glauco Zago, Omar Moreira Bacha, Franco Scariot
Complexo Hospitalar Santa Casa de Porto Alegre – Porto Alegre, Brazil

INTRODUCTION: Acral melanoma (AM) is the fourth distinct variant of cutaneous melanoma in frequency. There have been reports on the literature that Afro-Americans may have an increased frequency of AM. It occurs mainly on the palms, soles, subungual regions and digits. Histopathologically, it may assume one of four patterns: acral lentiginous, superficial spreading, nodular and unclassified type. Typically, AM is diagnosed at a relatively advanced stage. MATERIAL AND METHODS: Between April 2001 and May 2005 175 patients (total of 181 lesions) were treated by a single surgical oncologic team in a reference center in Porto Alegre. AM diagnosis was evident in 16 patients (total of 17 lesions). We have analyzed gender, age, race, anatomic localization, histology and tumoral thickness. RESULTS: Among 11 (total of 12 lesions) analyzed patients, all were Caucasians, 81.8% were women and age varied from 23 to 78 years. The sites were 75% in plantar region and 25% in dorsal region of the feet. The most frequent histological subtype was acral (8 cases, 66.6%), followed by 25% of nodular subtype and 8.3% of superficial spreading variant. Deep of lesions were: 2 cases 1,0 mm; 1 case between 1,01 and 2,0 mm; 2 cases between 2,01 and 4,0 mm and 7 cases with thickness larger than 4,0mm. T4 classification was found in 58.3%. CONCLUSION: We detected a predominance of female gender, primary site on plantar region, acral histological subtype and the thickness larger than 4,0 mm. Despite the described ethnical distribution of acral melanoma, our coort has an unusual prevalence of Caucasians.

P-02*

Alpha-V-Beta3 Integrin Expression in Melanocytic Nevus and Cutaneous Melanoma

Gilles Landman, Dante Neto Simionato, Luciana Pantaleão, Bianca Costa Soares de Sá
Centro de Tratamento e Pesquisa Hospital do Câncer A.C. Camargo – São Paulo, Brazil

INTRODUCTION: Alpha-v-beta3 integrin (avb3) is a ligand to vitronectin and increased expression of subunit beta 3 appears to be related to melanoma progression, a possible indication of aggressive behavior. In melanoma cell cultures, avb3 expression is inhibited by heat shock protein 27. Activation of metalloproteinase-2 (MMP-2) is simultaneous to avb3 expression, either in primary invasive melanoma and metastases, both in vivo and in vitro. Furthermore, VEGF appears to modulate avb3 expression. OBJECTIVES: We aimed to evaluate the expression of avb3 in melanocytic nevi, superficial spreading cutaneous in situ melanoma, invasive and metastatic, both in conventional and tissue array (TMA) paraffin embedded tissue specimens. We also analyzed the relationship between avb3 expression to histopathological variables and patient survival. MATERIAL AND METHODS: A total of 159 tissue samples from compound nevi (n=19), in situ melanoma (n=5), thin melanoma (n=34), thick melanoma (n=72), metastatic melanoma (n=29). Thick (>1.01 mm) primary cutaneous and metastatic melanoma was included in a TMA with 111 samples in duplicate. The remaining samples were stained in conventional sections. Anti-avb3 integrin (Abcam, UK) was diluted at 1:50, and the results scored from 0 to 12. RESULTS: Compound nevus epithelioid cells had a mild expression of avb3. In situ melanoma cells had a significantly higher score among all specimens, when compared to nevi staining (p=0.0000) and to invasive melanoma (p=0.0003). Expression of avb3 did not differ according to depth of invasion. Lung metastases had the lowest median score among all. No increased expression of avb3 was found in metastatases. CONCLUSION: Our series have shown no differential expression in primary invasive melanoma, regardless of depth, nor between primary and metastatic disease, indicating that avb3 integrin might have no impact on melanoma behavior. However, high levels of avb3 integrin expression for in situ melanoma may be related to pre-invasive phenotype preparation to invasion.

*awarded abstract

P-03

An Epidemiological Study of Melanoma at João Pessoa City

Otavio Sergio Lopes, Anna Luiza Marinho, Marilia Lopes Cavalcanti Melo, Flávia Estrela Maroja, Livio Pinheio do Egyto
Serviço de Oncologia Cutânea Hospital Napoleão Laureano – João Pessoa, Brazil

INTRODUCTION: Melanoma is a malignant melanocytic neoplasia, which originates from

melanocytes, located in the basal layer of epidermis and less frequently in dermis and sebaceous glands, or in the mucosa and choroids. All races are affected, being rare in black and common in those with white skin. It is usually prevalent between patients aged 30-60 and it has no preference for gender. Incidence has increaseed 4% to 8% a year in caucasians and nowadays it represents 3% of all new cases of cancer. Its genesis has been related to a number of factors such as genetics, sun exposure and repeated trauma. It is classified in four basic types: superficial spreading melanoma, which is the most common one; lentigo maligna melanoma; acral lentiginous melanoma and nodular melanoma. The authors conducted an epidemiological study with the purpose to compare the clinical and the anatomopathological diagnosis of melanoma and to identify the most frequent types and locations of such disease in our service. MATERIAL AND METHODS: The material consists in a sample of 43 patients, 20 females and 23 males, with cutaneous lesions, which were later histologically confirmed as melanomas, in an age distribution between 17 and 91 years old. Some patients had more than one lesion, making a total of 51 lesions analyzed, and others looked for our service already with metastasis on lymph nodes. A retrospective case-control study was taken from January 14th, 2002, through December 17th, 2004. RESULTS: Melanoma predominated on males (53,5%) between 60 and 80 years old. The lesions were more frequent on their back, face and lower legs (each of them with 17,65%). The clinical diagnosis were lentigo maligna melanoma (1,96%), melanoma (62,74%), squamous cell (1,96%), basal cell (3,92%), not specified (23,53%) and metastatic melanoma on lymph nodes (5,89%). However, the anatomopathological diagnoses were lentigo maligna melanoma (1,96%), superficial spreading melanoma (5,88%), nodular melanoma (11,76%), acral lentiginous melanoma (9,80%), metastatic melanoma (11,76%) and malignant melanoma without a specific type (58,84%), resulting in a percentage of correct diagnosis for melanoma was 70,59%. CONCLUSION: In the present study, we concluded that the number of correct diagnoses was satisfactory in our service. The malignant melanoma without a specific type was the predominant type and the main locations were back, face and inferior members. Unfortunately, the results sent by the anatomopathologists were non-specific and did not allow us to classify the types of melanoma correctly.

P-04

Analysis of 203 Cases of Sentinel Lymph Node Biopsy in Cutaneous Melanoma

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INTRODUCTION: Cutaneous melanoma is the most severe kind of skin cancer, although it represents only 4% of skin cancer cases. That happens due to its high dissemination rate when detected, compared to others skin tumors. One of the methods being currently researched to provide an accurate staging is sentinel lymph node biopsy (SNLB). This study presents our experience with this technique. MATERIAL AND METHODS: We studied 203 patients with cutaneous melanoma who underwent SNLB between June 1999 and April 2005. Of these, 55,7% were females and 44,3% were males. The mean age of the patients was 50,07 years (range 21 – 94). Clinicopathologic cellular subtypes were divided as follows: superficial spreading (68%), nodular (14,3%), acral lentiginous (3%), lentigo maligna (2%), amelanotic (0,5%), desmoplastic (0,5%) and undetermined (11,8%). Primary tumor Breslow thickness was: up to 0,74mm (18,2%), 0,75-1mm (16,3%), 1,01-2mm (33%), 2,01-4mm (16,7%), >4mm (10,3%) and undetermined (5,4%). Histological regression of the primary tumor was observed in 30%, and ulceration in 16,7%. Sentinel lymph node biopsy was performed as an additional staging procedure after primary lesion resection. RESULTS: Sentinel lymph nodes were identified in 193 patients (95,1%). Of those 193 cases, 1 lymph node was identified in 102 patients (52,8%), 2 in 45 patients (23,3%), 3 in 27 patients (14,0%) and 4 or more lymph nodes in 19 patients (9,8%). Twenty-seven patients (14%) presented lymphatic drainage to more than one basin. Metastases in sentinel lymph nodes were detected in 22 patients, 19 by histopathological examination and 3 by imunohistochemistry. The more frequent cellular subtypes were superficial spreading (54,5%) and nodular (36,4%). CONCLUSION: Sentinel lymph node biopsy in cutaneous melanoma is a feasible technique. We achieved radical lymphadenectomies with low disease burden and an accurate staging with a minimally invasive method. Therefore, we have concluded that SLNB is an invaluable tool in staging of cutaneous melanoma. Upstaging of the disease occurred in 10,8% of patients through histopathological and imunohistochemistry evaluation of the identified lymph nodes. Histopathological examination had 13,6% false-negative results in our series, compared to imunohistochemistry.

P-05

Angiotropic Metastatic Malignant Melanoma: a Case Report

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INTRODUCTION: Malignant melanoma can metastasize through vascular and lymphatic channels.

Angiotropic malignant melanoma is an unusual pattern of metastasis characterized by melanoma cells invading the walls of small blood vessels in the subcutis. MATERIAL AND METHODS: In this paper we describe a case of angiotropic malignant melanoma. RESULTS: A 57-year-old man presented with a melanocytic lesion on the scalp. Incisional biopsy diagnosed an intradermic nevus. Eight years later, a fast pattern of local growing was observed, a new biopsy was performed and, at this time, the diagnosis of a Breslow 3 mm Clark V malignant melanoma was established. Sentinel lymph node biopsy revealed cervical involvement. Total lymph node dissection detected three positive nodes. CT scans and bone cintilography were negative, leading to a final T4N2M0 staging. Immunotherapy with interferon-2a (Kirkwood protocol) was initiated. On the 10th month of adjuvant treatment, disease progression with a pigmented lesion was observed around the surgical scar. Immunotherapy was then interrupted and radiotherapy was proposed. One month after radiotherapy, disease progression was detected at CT scans with mediastinal node metastasis, hepatic nodes and rising lactate dehydrogenase. A new immunotherapy with interleukin-2 was introduced, but toxicity was observed and the treatment was stopped. After 3 months of best supportive care, the patient had progressive brain metastasis and died. CONCLUSIONS: Angiotropism is a rare pattern of metastasis for melanoma. There are few cases reported of melanoma vascular invasion of the walls of small blood vessels. This case emphasizes the importance of carefully inspecting for melanoma cells all vessel walls, in addition to lumina, while examining microscopic sections.

P-06

Breslow Clark Versus Histology in Melanoma

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INTRODUCTION: The citizens of Blumenau city and region are white colored skin and are exposed to high UV indexes throughout the year; those two situations together are the most important risk factors on developing melanoma. This paper will improve our comprehension on the histologic patterns and prognosis factors. MATERIAL AND METHODS: All cases of melanoma diagnosed in the pathology laboratory between 2002 and April 2005 were included in the study, in a total of 201 cases, including 116 cases of primary disease. Margins, lymphovascular invasion and ulceration were compared with a Breslow-Clark (BC) index using the Chi-squared statistic test. For the purpose of this study we define as BC 1 = Breslow less than 1 mm and Clark level 1; BC 2 Breslow less than 1 mm and Clark level 2 or 3; BC 3 Breslow less than 1 mm and Clark level 4 or 5; BC 4 Breslow more than 1 mm and Clark level 2 or 3 and BC 5 Breslow more than 1 mm and Clark level 4 or 5. RESULTS: 73% of cases with BC 1, BC 2 or BC 3 did not ulcerate; 76% of BC 4 or BC 5 ulcerated.p=0,0000; 100% of cases with lymphovascular invasion was in BC 5; 100% of cases BC 1, BC 2 or BC 3 had no lymphovascular invasion. p=0,0088; 64% of cases with BC 1, BC 2 or BC 3 had margins free of disease; 64% of cases without free margins was in BC 5.p=0,001; 93,1% of tumors BC 4 or BC 5 had more than 6 atypic mitosis.p=0,0000. CONCLUSION: There is statistical relation between ulcer and tumor depth (Breslow´s level) with no relevance regarding Clark level. Lymphovascular invasion is statistically related with tumor depth (Breslow´s level) with no relevance regarding Clark´s level. There is statistic relation between margins free of disease and tumor depth (Breslow´s level) with no relevance regarding Clark level. There is a superficial spread related to depth spread.p=0,0012. There is a statistical relation between vertical growth and atypic mitosis, which dramatically increases when tumors are deeper than 1 mm. Vertical growth has a strong direct statistical relation with ulceration, lymphovascular invasion, radial growth and mitotic rate.

P-07

Campinas Experience with Sentinel Lymph Node Mapping in 219 Cutaneous Melanoma Patients, Micrometastasis Risk in Breslow Thickness Less Than 1 mm

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INTRODUCTION: The Sentinel Lymph Node Status (SLN) is one of the most important prognostic factors in melanoma patients, like Breslow thickness and ulceration, and it plays an important role in the new pathological staging concept. Nevertheless there is some controversy about which is the minimal thickness to indicate the procedure. MATERIAL AND METHOD: This is a retrospective analysis of 219 consecutive cases of SLN mapping operated in a Public Tertiary Hospital and in the Private Clinic of one of the authors (HS). The technique was the standard with blue dye injection of patent or methylene blue and gamma probe. RESULTS: The majority of patients were women (51%), with mean age of 53 (range 13 – 90). The primary site of melanoma was trunk (34%), inferior extremities (26%), superior extremities (21%) and head and neck (19%). The mean Breslow thickness was 2.151. The SLN was positive in 43

patients (20%), with a mean Breslow of 3.366 mm, and negative in 176 (80%) with a mean Breslow of 1.818 mm. SLN mapping was performed in 68 patients with Breslow thickness less than 1 mm, and 6 (8%) were positive. In patients with tumor thickness ranging from 1 to 1.99 mm, 23% had positive SLN; from 2 to 3.99mm, 28% were positive, and for 4 mm or greater thickness 38% were SLN positive. Among the 6 patients with positive SLN and Breslow less than 1mm, just one was Clark IV, considered an important prognostic factor for thin melanoma, while the remaining 5 patients were Clark III. CONCLUSION: As expected, the greater the Breslow thickness is the more likely the SLN will be positive in cutaneous melanoma. In patients with Breslow less than 1 mm thickness, the SLN micrometastases are less common, but its risk must be considered with the patients.

P-08
Cerebellopontine Angle Metastasis Responsible for the First Clinical Symptom of a Cutaneous Melanoma

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INTRODUCTION: Cutaneous melanoma (CM) is among the malignant tumors with the most rapidly increasing frequency rates in Caucasian populations. It is the third most common tumor to metastasize to the brain. The frequency of central nervous system (CNS) as the initial site of melanoma metastases ranges from 12% to 20%. Brain metastases are one of the most important causes of death from melanoma and most frequently involve the cerebrum. Cerebellopontine angle (CPA) metastatic lesions account for only 0,2% of CPA tumors. We describe a rare case of CM metastasis at the CPA responsible for the first clinical symptom of the neoplasm. The clinical, radiological and histological findings are discussed, and the literature is reviewed. CASE REPORT: A 44-year-old man was admitted to the hospital with 1-year history of seizures and 1- month history of left-sided hearing loss, tinnitus, left facial weakness, vertigo, left hemiparesis, frontal headache, visual changes and vomiting. Neurological examination confirmed a facial weakness, ataxia, nystagmus and left hemiparesis. During the physical examination a raised brownish lesion 2-cm diameter, with irregular borders, was found in the trunk with a histological diagnosis of CM. A magnetic resonance imaging demonstrated multiple nodular lesions in left CPA and right posterior parietal region, and leptomeningeal tumoral dissemination with supra and infratentorial involvement. A surgical excision of the left CPA lesion was performed with a histological diagnosis of possible metastatic melanoma. DISCUSSION: Brain metastases are a major cause of morbidity and mortality among CM patients. The cerebrum is the most frequently involved location, followed by cerebellum, base of the brain and spinal cord. Patients with no history of melanoma can present with symptomatic brain tumors, which are subsequently proven to be metastatic melanoma. Headache and seizures are the most common manifestations of brain metastases. In rapidly progressing audiovestibular symptoms, metastases to the CPA should be considered. CPA tumors are uncommon: 80% to 90% are vestibular schwannoma and less than 1% are malignant tumors. Pigmented metastatic lesions at the CPA are particularly rare and may be due to malignant melanoma, melanocytoma, pigmented schwannoma, or pigmented medulloblastoma. Clinically and radiographically, these lesions resemble acoustic schwannomas. CPA metastatic melanoma may arise up to 13 years after treatment of the primary lesion, with a poor prognostic. CONCLUSION: Skin lesions, especially in non-exposed areas, such as the trunk, remain unnoticed by most people. The CPA as the initial site of metastases of melanoma is very rare, but clinicians must think about it as a possible differential diagnosis.

P-09*
Clinical, Demographic and Histopathological Evaluation of 529 Melanoma Cases Diagnosed in the State of Bahia – Brazil

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INTRODUCTION: Melanoma has the largest frequency increase among all cancers worldwide. Studies addressing the characteristics of melanoma in the state of Bahia, Northeastern Brazil, showed a high rate of acral melanoma. OBJECTIVE: This study documents general aspects of melanoma, evaluates clinical, demographic and histophatological characteristics of melanoma in the state of Bahia, emphasizing racial differences and the role played by inadequate previous manipulation. MATERIAL AND METHODS: Retrospective data from a single oncologist surgeon. Study period: 01/03/1992 to 03/31/2005, encompassing 529 consecutive cases with histopathological confirmation. Variables studied: age, gender, race, site of the primary lesion, Clark level, Breslow thickness, growth phase, time of disease manifestation, type of biopsy (incisional and excisional),

presence of ulceration, histological subtypes, previous manipulation, treatment, recurrence, overall survival, and mortality. Criteria for inadequate previous manipulation: primary surgery without anatomopathological study; chemical or electrical cauterization; inadequate margins; lymph node sampling and absence of radical lymphadenectomy in stage III. RESULTS: 529 cases, 154 (public) and 375 (private). Follow-up loss of 2.45%. Median follow-up 5 years. Average age of 54.1 years. males 42.1% and females 57.9%. Average time between patient perception of lesion and diagnosis: 19 months. Clark level was not measured in 7.1% and Breslow thickness in 19.2%. Race distribution: white 75%, mulatto 11% and African-Americans 14%. Histological subtype: 18% acral, 52% superficial, 25% nodular, 2.8% lentigo, 2.2% not classified. In white patients superficial melanoma corresponded to 56% and in the African-American race acral was found in 83%. Disease staging: I - 58%; II - 22%; III - 13% and IV - 7%. Previous manipulation: 13% inadequate. Overall recurrence 8.8% (local 2.1% and distant 6.7) and overall mortality 14.7%. Significant for mortality (univariated analysis): Clark level; Breslow thickness > 1.0 mm; ulceration; nodular and acral melanoma; vertical growth phase; recurrence; inadequate previous manipulation and stage III and IV. Multivariate analysis, with logistic regression, revealed independent prognostic factors significant for mortality were: stage ($p < 0.00000001$), with odds ratio of 48.3 (IC 96% 10.7 – 88.5); followed by inadequate previous manipulation ($p = 0.002$), and odds ratio of 5.23 (IC 95% 1.8 – 13.27). CONCLUSIONS: Patients from Bahia have a higher than reported frequency of acral melanoma. There is a prevalence of acral melanoma among African-Americans. There is a relevant delay in diagnosis. Inadequate previous manipulation was an adverse prognosis factor for recurrence and mortality, being just overcome by disease stage.

*awarded abstract

P-10

Cutaneos Melanoma: Retrospective Analysis of 191 Consecutive Patients

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INTRODUCTION: This is a historical retrospective and descriptive presentation of 191 sequential melanoma patients from Hospital de Câncer de Barretos – SP, recorded from 2000 to 2003. MATERIAL AND METHODS: We carried out a retrospective study on medical records of 191 cutaneous melanoma cases presented from 2000 to 2003. The following variables were studied: Gender, age, race, tumor localization, histology, stage, Breslow measurement, Clark levels, sentinel lymph node, treatment, lymph node disease, lymphadenectomy, local and distant recurrences, follow-up and status. The survival analysis utilized the Kaplan Meier method. RESULTS: The age ranged from 14,9 to 90,3 years (mean: 45,6+-15,1); Gender: 102 males (53,4%) and 89 females (46,6%); Race: 176 Caucasians (92,1%) and 15 Afro-descendents (7,9%); Localization of primary tumor: 29 head and neck (15,2%), 65 trunk (34%); 31 upper extremities (16,2%), 31 lower extremities (16,2%), 3 hand (1,6%), foot 22 cases (11,5%), multiples 3 (1,6%) and unknown primary 6 (3,1%); Histology: Acral lentiginous 9 cases (4,7%), nodular 41 (21,5%), superficial spreading 47 (24,6%), lentigo malignant 11 (5,8%), not classified 21 (11%) and not recorded 62 (32%); The Breslow measurement: less or equal 1mm: 45 cases (23,6%), 1,1 to 2mm: 31 (16,2%), 2,1 to 4mm: 32 cases (16,8%), more or equal 4,1mm: 43 cases (22,5%). Not analyzed: 40 cases (20,9%); Clark levels: I 11 cases (5,8%),level II: 19 (9,9%); level III: 49 cases (25,7%), level IV: 59 cases (30,9%), level V 18 cases (9,4%). Not analyzed: 35 cases (18,3%); Stage system (TNM): Stage 0 13 cases (6,8%), stage I 46 (24,1%), stage II 50 (26,2%), stage III 29 (15,2%), stage IV 32 (16,8%). Stage X 21 (11%); Treatment to the primary tumor: Resection and primary closure: 101 cases (52,9%), Resection and reconstruction flap: 10 (5,2%), resection and skin graft: 34 (17,8%), amputation: 9 (4,7%), others: 9 (4,7%), not operated (14,7%); The sentinel lymph node resection was performed to 32 cases (16,8%) and was positive for melanoma in 5. Lymphadenectomy was performed to 54 cases: 49 with gross disease and 5 after diagnose of metastasis to the sentinel lymph node. The more affected lymph node basis was the unilateral axilla: 31 cases (57,4%), bilateral axilla: 3 (5,6%), inguinal unilateral: 13 (24,1%), cervical: 6 (11,2%). Local recurrence occurred to 12 patients (6,3%); Distant metastasis occurred to 65 patients (34%) during follow-up. 21 not visceral (11%), 20 visceral (10,5%) and 24 both visceral and not visceral (12,6%); Follow-up ranged from 0,03 to 64,83 months (median 27,3 months); The actuarial 5 years survival was 75,39%. Status on the last evaluation: Alive free of disease: 113 patients (59,2%); alive with disease: 18 (9,4%), dead from disease: 35 (18,3%), dead from other causes: 7 (3,7%), Dead from unknown cause: 5 (2,6%), Loss of follow-up: 13 (6,8%). CONCLUSIONS: This is a descriptive analysis of historical data from a single institution. Majority of patients were Caucasians at productive age; the most common primary tumor localization was trunk; tumor thickness was heterogeneous, most patients with thin (less than 1mm) and thick lesions (more than 4mm); the majority of surgeries had low complexity, not requiring reconstruction. The sentinel lymph node method was seldom applied because it was introduced lately. When

applied, it had high positivity (15,62%); advanced stages (III and IV) presentations were common (61 patients – 32%), probably because it is a referral cancer hospital. There were few local recurrences (6,4%); the more frequent nodal metastasis basis was the axilla; half of metastatic patients presented with cutaneous or lymphatic metastasis. Follow-up loss was low (6,8%). The actuarial 5 years survival was high (75,39%).

P-11
Cyclin D1 Expression in Superficial Spreading Cutaneous Melanoma

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INTRODUCTION: Cyclin D1 gene encodes regulatory enzymes that promote progression through the G1-S phase of the cell cycle. Overexpression of its encoded protein (CD1) has been found in many tumors. However, in melanoma, the actual role of CD1 is not completely understood. OBJECTIVES: We aimed to evaluate the expression of CD1 in nevi, superficial spreading cutaneous in situ, invasive and metastatic melanoma, both in conventional and tissue array (TMA) paraffin embedded tissue specimens. We also analyzed the relationship between CD1 expression and tumor thickness. MATERIAL AND METHODS: A total of 175 tissue samples from compound nevi (n=10), in situ melanoma (n=20), thin melanoma (n=44), thick melanoma (n=72), metastatic melanoma (n=29). Thick (>1.01 mm) primary cutaneous and metastatic melanoma, and nevi were included in a TMA with 121 samples in duplicate. The remaining samples were stained in conventional sections (n=64). Skin, lymph node and lung metastases were included. Immunostaining using mouse anti-Human Cyclin D1 (Santa Cruz SC-839), diluted at 1:320 was performed. Only nuclear staining was scored as positive. Positivity cut off was > 8.66 % (percentile 90). RESULTS: None of the nevi expressed CD1. Overall positivity in melanoma was 9.8 %. In situ and thin melanomas had a significantly higher expression than thick melanomas (p=0,004). Expression of CD1 in metastasis did not differ according to localization and none of them expressed CD1 above 8,66%. CONCLUSION: Our series have shown differential expression between thin and thick and metastatic melanomas and nevi. This may indicate that expression of CD1 may be an early event in the malignant transformation. However, other factors may influence such expression, and will be evaluated in the same series in the next future.

P-12
Dermoscopy of Mucosa

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INTRODUCTION: Melanosis is a benign pigmented lesion of mucosa, particularly when occurring on genitalia or nipple, and may clinically mimic mucosal melanoma. The characteristics described by Friedman *et al* as being most predictive of melanoma are asymmetry, border irregularity, color variation, and a diameter greater than 6 mm. Non-invasive analysis by epiluminescence microscopy can be helpful in diagnosis. CASES REPORT: 1. Young woman, 17 years old, observed pigmented lesion on rigth nipple since the age of 10 years. She was receiving no medication during the development of that lesion and was using no topical preparations. She denied trauma to her nipple. Dermoscopic features: same areas show structureless pattern, characterized by diffuse pigmentation ranging from a light brown to a dark brown hue, seldom irregularly distribuided and brown globules too. A 4 mm punch biopsy specimen was obtained from the darkest region of the lesions. Histopathological diagnosis: Intradermal melanocytic nevus. 2. A young Caucasian woman, aged 20, has a pigmented lesion on her left nipple since she was born. The worrisome features of that lesion include irregular borders, variation in pigment, large diameter, and asymmetry. Two years later, the lesion was completely excised. Dermoscopic features: brown globules and black dots. Histopathological diagnosis: Juncional melanocytic nevus. DISCUSSION: Many theories related to the possible cause of lesion pigmented on mucosae have been proposed, but the exact etiology and pathogenis of these alterations remain to be known. The excessive pigmentation could be secondary to a chronic stimulus in the area or due to a defect in the normal transport of melanine to suprabasal keratinocytes. Carli *et al* reported three major dermoscopic patterns: a structureless pattern, a parallel pattern and reticular-like pattern associated with clinically equivocal melanosis occurring in peculiar sites such as the areola or, rarely on the lip. Melanoma occurs in the same sites as the melanotic macules and may have simlar clinical characteristics, with the exception that papules, nodules and ulceration usually are present with melanoma. The management of lesion of mucosa must be individualized. Histopathologic examination should be carried out to

establish a diagnosis. CONCLUSION: Dermoscopy can play a role in the non-invasive classification of pigmented lesion. Prospective studies including early melanomas are needed to establish diagnosis performance of dermatoscopy in pigmented lesions of the mucosa.

P-13
Epidemiological Aspects of 111 Malignant Melanoma Cases

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INTRODUCTION: Melanoma has a high and still growing frequency around the world, mainly in tropical areas, such as Brazil. Brazilian epidemiological records show 4370 new cases in this country and 50 in the Pernambuco state. The same national articles reveal how prevalent among white women aged 40 or more, superficial spreading melanoma as a histological type is on the trunk and limbs. The purpose of this paper is to analyze the epidemiological aspects regarding 111 cases studied and to compare those with the literature. MATERIAL AND METHODS: Retrospective appraisal was carried out on 111 cases of cutaneous malignant melanoma treated at the private clinic UNIONCO in the period from January 1980 to March 2005, with an average of 4.5 patients per year. The Cancer Register of that institution meets the requirements established by the Brazilian Ministry of Health and was used for standardization of the Complete Protocol of the Melanoma Brazilian Group, to which we are affiliated. RESULTS: 67 women (60.40%) and 44 men (39.60%) were registered. The age group varied: 24 patients (21.62%) were between 0 to 39 years old, 75 (67.57%) from 40 to 79 years old and 12 patients (10.81%) were more than 80 years old. The location of the lesion was: 43 cases on trunk (38.74%), 24 on hips and legs (21.62%), 22 cases on shoulder and arms (19.82%), 6 on face (5.40%), 4 cases on scalp and neck (3.60%) and 12 for whom the primary location was not cited (10.80%). As to the histological types verified: 36 were nodular (32.43%), 35 cases were of superficial spreading melanoma (31.50%), 8 in situ (7.20%), 7 amelanotics (6.31%), 5 malignant lentigos (4.50%), 3 acral melanomas (2.70%), and 17 not specified (15.31%). Breslow classification: smaller or equal to 1mm in 31 cases (27.90%), Breslow between 1.01 and 4 mm in 34 cases (30.60%), larger than 4 mm in 6 cases (5.40%) and 32 cases (28.80%) did not have Breslow identified in the pathological exam. CONCLUSION: In the sample studied, malignant melanoma followed the classic patterns: prevalence in the female and in the age group between 40 and 79 years old; the most frequent location is on the trunk, superficial spreading melanoma as the histological predominant type and Breslow between 1,01 and 4 mm.

P-14
Epidemiological Consideration in Cutaneous Malignant Melanoma. A Retrospective Study of 303 Patients and Literature Review

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INTRODUCTION: Cutaneous Malignant Melanoma (CMM) is one of the most important tumors in terms of epidemiology. The frequency and mortality rates have increased substantially during the past several decades and continue to increase among all Caucasian populations. The estimated lifetime risk in the United States is 1 in 75 people. Primary prevention of melanoma and early detection are essential to reduce melanoma mortality in future years. There are a few studies in Brazil about this type of cancer. The CEDISA/UFPR is a public health service in Curitiba with an Oncology Skin Service. The purpose of this survey is to present an epidemiological analysis of patients with malignant melanoma and to compare the results with other studies, including the Melanoma Brazilian Group. MATERIAL AND METHODS: Between 1995 and 2004, 303 patients with 315 lesions of cutaneous malignant melanoma (CMM) were reviewed at the Oncology Skin Service of CEDISA-UFPR. Rsults were submitted to statistical analysis. RESULTS: This analysis demonstrated that CMM was more common among Caucasians (70%) and women (68%). A higher frequency was observed among patients between 40 and 80 years of age (72%). Superficial spreading melanoma was the most frequent type (63.94%). The tumors were predominantly located on the back (23,89%) and face (19,11%). In 38,96%, the tumor was smaller than 1mm in depth according to Breslow classification. Tumor ulceration was found in 14% and was higher in the nodular type (42,4%). CONCLUSIONS: Our results were similar to GBM database, except the Breslow index in which we found more cases with 1 mm or less. This study demonstrated that the diagnosis of CMM was found to be more predominant in early stage.

P-15

Follow-up After Lentigo Maligna Excision

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INTRODUCTION: Lentigo Maligna (LM), a melanocytic skin lesion, is a potential precursor to melanoma. LM has been designated as melanoma in situ. It occurs on the sun-exposed skin of elderly persons, most often affecting the skin of head and neck region. LM is also noted for its tendency to locally recur after treatment. MATERIAL AND METHODS: Between April/2001 and May/2005, 175 patients (total of 181 skin lesions) were attented by a single surgical oncology team in a reference service in Porto Alegre / Brazil. We have analyzed gender, age, race, anatomic localization, excision margins, follow-up period and local recurrences of lentigo maligna. RESULTS: Among 150 patients analyzed, all were Caucasians, 71.4% were woman and the age varied from 34 to 73 years. Fourteen patiens (total of 15 lesions) were diagnosed as LM: 5 (33,3%) were localized in the upper extremity, 4 (26,6%) in lower extremity, 2 (13,3%) in back and 2 (13,3%) in head and neck. All of them were treated surgically with margins amplifications of at least 1 cm. The average follow-up was 25 months (varying from 5 to 49 months). Local recurrence was observed in 14,28% patients. CONCLUSION: In our series, we observed a high frequency of extremities lesions and a local recurrence rate similar to literature descriptions.

P-16

Four-Year Experience: Cutaneous Melanoma Submitted to Sentinel Lymph Node Biopsy at the Instituto Nacional de Câncer (INCA)

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OBJECTIVE: Sentinel lymph node biopsy (SLNB) in patients with cutaneous melanoma was initially described in 1992 by Morton Since then, this procedure has gained interest and currently is the standard procedure in patients with cutaneous melanoma and Breslow tumor thickness > 1 mm, thout evidences of lymph node metastasis. The therapeutic value of this procedure is questionable and is still under investigation in prospective studies, but its impact in the prognosis is unquestioned and is now included in the revised staging system for cutaneous melanoma, proposed by the American Joint Committee of Cancer (AJCC). Since May 2000 this procedure has been routinely employed in all patients with indication and the objective of this study is to report our results and compare them with those described on the literature. MATERIAL AND METHODS: In the period from May/2000 to December/2004, 260 patients were submitted to SLNB at INCA. All presented Breslow tumor thickness >1mm, areas of regression without evidences of lymph node metastasis. Preoperative lymphoscintigraphy and the intraoperative use of both a gamma probe and blue dye were performed in all patients. Sentinel lymph nodes were initially evaluated by pathologists during the surgical act, followed by paraffin and immunohistochemistry (S - 100 and HMB – 45). All patients with positive SLNB were submitted to complete lymphadenectomy of the nodal basin. RESULTS: Among the 260 patients, 54.2% were women and 45.8% were men whose age ranged from16 to 89 years old (mean of 55). Whites were the majority with 84,6%. The most common localization was trunk (40,4%), followed by lower limbs (26,2%), foot (18,9%), upper limbs (13,1%) and hand (1,6%). Breslow tumor thickness ranged from 0 (in situ) to 37 mm (median of 2 mm) and 29.2% presented Breslow tumor thickness between 1 and 2 mm, 28.1% between 2 and 4 mm and 18.1% above of 4 mm. Clark level was higher than III in 87.7% of patients and ulceration was present in 20%, while regression was observed in 17,7%. 73 patients (28.1%) had positive SLNB. Among those, 20 (27,4%) had micrometastasis. The number of lymph nodes found in the lymphoscintigraphy ranged from 0 to 6 with (mean of 1), while in surgery that number ranged from 0 to 4 (mean of 1). The number of lymph nodes found after lymphadenectomy among patients with positive SLNB ranged from 0 to 44 (mean of 12,3). The overall survival (OS) was 48 months, with a 4-year survival rate of 70%. Recurrence occurred in 51 patients (19.6%), of whom 22 (49,3%) had *in loco*, regional and distant metastasis, 21.9% had in-transit metastasis, 16.4% recurred at the nodal basin and 12.3% had local metastasis. While evaluating just the patients with negative SLNB we observed a recurrence rate within the nodal basin (local where the SLN was removed) of 4,8%, corresponding to the false negative cases. The OS was better in the group with negative SLNB with a statistically significant difference between the patients with positive SLNB, even when we stratified those patients according with Breslow tumor thickness (> 2 mm and < 2 mm) – p = 0,018, p = 0,025 and p = 0,033. CONCLUSION: SLNB has been successfully employed at INCA since 2000, without complications inherent to the execution of the procedure. A high rate of identification of SLN was obtained, with false negative rate of 4,8%, which was comparable with results described on the literature (varying around 5%). The

statistically significant difference in the OS and disease free survival (DFS) among patients with positive SLNB and negative SLNB demonstrates the importance of the procedure for prognostic evaluation of patients with cutaneous melanoma, supplanting the Breslow tumor thickness and the presence of ulceration. Our results confirm the importance and safety of the method. Reduction of false negative rate has already been described on the literature and soon will be achieved in our service, with the implementation of new techniques for histopathologic investigation, improving even more the safety of the method and providing a more correct staging for those patients.

P-17
Giant Cellular Blue Nevus

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Cellular blue nevi (CBN) measure 1-2 cm in diameter and affect the dermis, occasionally extending into the subcutaneous fat. We report the rare occurrence of a giant infiltrating CBN on face. The child was born with a blue macula on the lower right eyelid, which gradually grew in size. He is now 14 years old and has an extensive CBN affecting the periorbital area, the right hemiface, the conjunctivae and the jugal mucosae. He also has a tumor in the lower eyelid which has infiltrated the bone and maxillary and ethmoidal sinuses. Biopsies revealed a CBN of the lower dermis that has infiltrated the subcutaneous fat, skeletal muscle, bone and the maxillary and ethmoidal sinuses, but shows no histological evidence of malignancy. There are rare reports of giant or plaque-like CBN. Similarly to the present case, some of them cause infiltration of deep structures such as skeletal muscle, bone, dura mater and breasts, without evidence of malignancy.

P-18
Higher Positivity of Sentinel Lymph Node in Acral Melanoma

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OBJECTIVE: Report protocol and results of sentinel lymph node in clinical stage I and II melanoma, with emphasis on different findings in melanoma subtypes, considering a higher frequency of acral melanoma in our state. MATERIAL AND METHODS: Patients with > 0.76mm, Clark IV, regression or ulcerated melanoma lesions, clinical stage I or II were referred to sentinel lymph node dissection. Treated by single oncologist surgeon. The standard technique included preoperative administration of Tec 99 and blue-dye, the use of gamma probe and lymphadenectomy. Samples were submitted to histopathological and imunohistochemical (S-100, Melan A and HMB-45) evaluation. Whenever the sentinel node proved to be involved, patients were submitted to radical dissection. RESULTS: Between November 1996 and March 2005 154 patients were studied. Average age: 54 years, female sex: 58.4%, topography: extremities (41.5%), trunk (45.5%), head and neck (13%), race: white (77.9%), thickness: <1.00 mm (27.3%), 1.00 – 4.00 mm (51.9%), > 4.0 mm (20.8%). Median of lymph nodes were identified (median 1.5/patient). Success identification rate = 99.3%. Sentinel lymph node was not found in a single patient who was studied just by blue-dye and cervical region. SL was positive in 19.4% of patients, in contrast with 25.9% of acral melanoma patients ($p<0.05$). In two cases SL was positive Breslow < 1 mm, without ulceration, regression or level Clark IV, but in both with vertical growth phase. Among SL positive patients radical lymphadenectomy was further positive in 48.5% of them. Distant metastasis developed in two patients with SL negative and one local relapse and metastasis of regional node. Mortality of SL node negative 1.29% patients. Five (2.6%) node positive patients have died (48 month follow-up), one with acral melanoma. CONCLUSIONS: In Bahia, a high proportion of population is dark-skinned, which explains a higher proportion of acral melanoma (18%). That group showed a higher percentage of positivity in sentinel lymph node. Further studies should be performed to evaluate other histophatological features of acral melanoma subtype such as ulceration, thickness of Breslow, sex and topography of tumor, which could influence the lymphonodal positivity and prognosis.

P-19
Histopathological Analysis of Primary Cutaneous Malignant Melanoma at Laboratório Central de Anatomia Patológica da Secretaria da Saúde do Estado do Rio Grande do Sul: a Prevalence Study

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INTRODUCTION: The frequency of cutaneous melanoma has increased at a rate of approximately 4 to 6% annually. This neoplasm occurs preferably in females,

between 30 and 79 years old, among Caucasian persons and the most common histopathological type is the superficial spreading one. The database for the Brazilian population is still inadequate. The purpose of this study is identifying and describing the histopathological characteristics of primary cutaneous malignant melanoma (PCMM) within a 5-year period. MATERIAL AND METHODS: We performed a transversal study based on the PCMM cases registered at Laboratório Central de Anatomia Patológica da Secretaria da Saúde do Estado do Rio Grande do Sul from September 1999 to September 2004. The sample is composed of PCMM lesions which were identified through histopathological characteristics. Variants analyzed were gender, age, city of birth, date of diagnosis, anatomic place, histological type, depth of invasion and thickness of tumor. RESULTS: 7588 skin biopsies were studied, with 58 cases of PCMM. Ages of the analyzed patients varied from 22 to 86 years old, with a larger frequency of women (70,7%). The most frequent type of tumor growth was the superficial spreading type (44,8%), followed by the nodular type (43,1%). The most observed level of invasion was Clark III for both sexes and 31% presented with less than 1,0 mm of Breslow thickness. The most frequently identified anatomic location of the primary tumor was the posterior trunk for both sexes, while the city presenting the largest percentual of PCMM cases was Porto Alegre, with a higher number of diagnosis during summer months. CONCLUSION: Finally, it is considered that the PCMM should be diagnosed in early stages, which understates the importance of patient information, available primary care and knowledge of the physician who performs the first evaluation of skin lesions. The data confirmed and clearly showed that emphasis should be given to specific programs to alert and instruct the population on self-detection of skin lesions. There is a larger frequency among women, probably because they are more aware and informed about the risks of PCMM. The cases treated by the public health network in Southern Brazil were very similar to the ones found in the developed countries.

P-20

Hyperthermic Antiblastic Isolated Limb Perfusion in Treatment of Advanced Cutaneous Melanoma of the Extremities

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INTRODUCTION: Hyperthermic antiblastic isolated limb perfusion (HAILP) consists in infusion of high-dose chemotherapic drugs in the diseased limb. The procedure requires vascular isolation of the affected limb, its perfusion through an extra-corporeal circulation device and progressive elevation of tissue temperature (to potentialize the drug's action). That technique, obviously, has indication restricted to locally advanced cutaneous melanoma, and the disease must be confined in a limb that can be completely isolated from systemic circulation. MATERIAL AND METHODS: Between May 1994 and August 2001, we performed 21 HAILPs, with Melphalano as chemotherapeutic agent. All patients presented American Joint Committee on Cancer (AJCC) stage III cutaneous melanoma, with satellite lesions and/or in-transit metastases. Most patients were females (17), and all were Caucasians. All but one HAILP were performed in lower limbs. We performed just one HAILP in superior limb. RESULTS: Of those 21 patients, 7 (33,3%) had complete response, 13 (61,9%) had partial response, and only one patient did not have an objective response to treatment. All patients observed subjective response to HAILP. The disease-free interval was 12,1 months. The disease-free interval was measured as the time between HAILP and the next therapeutic intervention, surgical or not. CONCLUSION: Hyperthermic antiblastic isolated limb perfusion increases disease-free interval and overall quality of life of patients. Although some studies don't corroborate the efficacy of such procedure, others demonstrated very good results, as a therapeutic option in patients with locally advanced cutaneous melanoma that doesn't respond to conventional chemotherapy. The most used drug is Melphalano, because of its low toxicity. It is an adequate procedure in patients with locally advanced disease, when surgery and other therapeutic options, alone or in combination, are not sufficiently efficient.

P-21

Immunotherapy for High-risk Recurrence Melanoma Patients with a Natural and Mimetic Peptide Based Vaccine

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INTRODUCTION: The frequency of melanoma is raising faster than the majority of other cancers. In some cases the early diagnosis does not mean cure, as it has a high metastatic potential. Patients with stage lower than III are just followed clinically. There is no treatment for those patients besides surgery. During the follow-up, some patients present tumor recurrence. This clinical trial intends to treat patients with early diagnosis and high-risk of recurrence. The main point of this protocol is to evaluate the tolerance, toxicity, route of

administration, and use of GM-CSF. As a secondary aim we intend to measure the disease free interval and recurrence as well. OBJECTIVES: The first objective was to define the proteins and immunological high relevance peptides for each protein. The second one was to discover the mimetic peptide for each natural one, through amino acid combinatorial sequence position changing. After that, we designed a low morbidity clinical trial phase I to evaluate toxicity and side effects related to this treatment. This clinical trial was also designed to measure immune response of patients against each peptide and try to link it with immune response against tumor, lymphocytes activation, clinical response and disease free relapse time. MATERIAL AND METHODS: This protocol is restricted to haplotype HLA 0201, included in 3 specific groups, according to the disease, clinical stage and treatment. Group A included patients N0 with high-risk of recurrence, group B included N 1-3 not using adjuvant therapy and group C included N 1-3 using Interferon-a2b. The vaccine is composed of 6 peptides from Melan-A, Tyrosinase and GP 100. From each protein they receive the immune-dominant natural peptide and the mimetic one with higher MHC class I binding, plus the higher immunity. The vaccine is administrated in 6 doses with 15-day interval. After the 3rd dose, the immunological response is measured by DTH of patients against each peptide. RESULTS: The initial results demonstrated that selection of these 3 proteins is important, due to higher chance of driving an immunological response against melanoma cells. Studying these proteins we had over 72 peptides candidates of mimetic peptide for each one. By applying immunological CTL *in vitro* using human lymphocytes and melanoma we selected the best mimetic peptide from each protein. These mimetics peptides were chosen among the ones with best binding to the MHC class I molecule of the antigen-presenting cell, with intact site of lymphocyte recognition and tumor expression. Based on these results we presented this protocol to the Board of Research and Ethics of Hospital das Clinicas at the Federal University of Minas Gerais, it was approved as protocol 193/03. This study is open and recruiting patients.

P-22

Immunotherapy for Metastatic Melanoma Patients Based on Dendritic Cells Plus Lysates and Apoptotic Tumor Bodies

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INTRODUCTION: There is no effective treatment for malignant melanoma metastatic disease. Such tumor cells bear a genotypic characteristic of invasion and distant dissemination. Regularly unusual patients present metastatic disease at the first time that they are diagnosed with melanoma. For these patients the median survival is between 6 months and one year and just 20% will be alive after the first year. As the majority of treatments fail to improve survival or cure, many innovative treatments have been proposed. On this abstract we present a clinical protocol based on immunotherapy with autologous dendritic cells plus tumor lysates and apoptotic bodies. OBJECTIVES: Evaluate toxicity, side effects and tolerance to this treatment. We will also look at disease free relapse time, survival and quality of life. The laboratory end-points are immune response of lymphocytes against the tumor, release of Interferon g and CTL. MATERIAL AND METHODS: We evaluated the best approach to present tumor antigens to the immunological system. Both tumor autologous lysates and also apoptotic bodies have some advantages and disadvantages. Patients with metastatic melanoma had 300 ml of blood collected and monocytes were isolated and matured to dendritic cells *in vitro* using complete medium with RPMI 1640, 100 ng/ml of IL-4 and GM-CSF. After seven days those monocytes were matured in antigen presented cells (dendritic cells). Those cells were then pulsed with a mixture of lysates plus apoptotic bodies *in vitro*. After fagocitosis they were washed and injected back to the patients intra-lymph nodal plus GM-CSF. On the next day they receive for 3 days low dose interleukin-2. RESULTS: Based in our results and also on the literature review, we decided that both tumor lysates and also apoptotic bodies present advantages and disadvantages. Based on that we decided to immunize the dendritic cells with a mixture of 50% of each tumor antigens. The first pilot projects showed that such approach was safe and well tolerated. Based on such initial results we wrote a clinical protocol, which was presented and approved by the Ethical and Research Bureau of the Hospital das Clinicas - UFMG under number 192/03. CONCLUSION: This appers to be an important clinical option for metastatic melanoma patients. This protocol is open and receiving patients and we hope that it could be improved to get a real advantage for those patients, with safety and low side effects.

P-23

Impact of Sentinel Lymph Node Involvement in Survival of Patients with Melanoma

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INTRODUCTION : Sentinel lymph node surgery has a large use today on staging melanoma patients, therefore

allowing a better evaluation of patient prognosis. The objective of this study is to analyze the survival and prognostic factors among patients with diagnosis of melanoma who were submitted to sentinel lymph node surgery. MATERIALS AND METHODS: The analysis encompassed 82 cases of the patients with skin malignant melanoma treated at the Erasto Gaertner Hospital from 1998 to 2004, with a medium follow-up of 18 months. Survival was demonstrated by Kaplan-Meier, and statistical analysis was carried out using Epi-info (3.3.2). RESULTS: Sentinel lymph node surgery was performed 20 to 40 days after resection of the primary melanoma. Isotope technique was combined with patent blue in 85% operations, 15% were only with isotope technique. Among the 82 patients submitted to sentinel lymph node surgery, 13 (15, 85%) had positive sentinel lymph node, and one had on two different sites: bilateral inguinal lymph nodes. Two patients of those had positive result (15,3%) and nine with negative lymph node (13, 04%) had recurrence. Among those, three had on regional lymph nodes (4,34%). Seventy-four patients (90,24%) are alive without disease, four (4,87%) are alive with active disease, and three (3,65%) died from melanoma. CONCLUSION: A 3-year survival was 100% for patients with positive sentinel lymph node, 74% for patients with negative sentinel lymph node. Breslow (P=1,000), vertical growth (P=0,6545), ulceration (P=0,6410) and regression (P=0,4231) were not significant on recurrence analysis.

P-24
Immunohistochemistry in Melanoma Staging

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INTRODUCTION: Malignant melanoma is becoming very important. Over the past decades, melanoma has become much more common; it increases both in frequency and mortality rates, accounting for 79% of skin cancer deaths. Tumor thickness, as measured according to Breslow, is the most powerful predictor of outcome. Treatment and survival of patients are related to Breslow. Measurement of tumor thickness may be difficult if there is a high density of tumor-infiltrating lymphocytes. MATERIAL AND METHODS: It was performed an immunohistochemical study on 70 cases of thin malignant melanoma with high density of tumor-infiltrating lymphocytes. The parafin sections were stained with MELAN-A and counterstained with Giemsa in order, to distinguish melanocytes from melanophages. RESULTS: The results presented positive cells for MELAN-A within the tumor-infiltrating Lymphocytes in 31 of 40 cases of "in situ" melanoma. This fact changed the staging of the malignant melanoma in those cases from Stage 0 to Stage I (According to the American Joint Committee on Cancer Staging System for Cutaneous Melanoma, 2001 - AJCC 2001). CONCLUSIONS: This study provides good evidence for use of such method to distinguish melanocytes from melanophages. Correct measure of tumor thickness provides more accuracy for Breslow thickness, leading to a more specific staging, treatment and outcome.

P-25
Isolated Limb Infusion for a Malignant Melanoma as an Alternative Techinique to an Isolated Limb Perfusion

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INTRODUCTION: Some patients with metastatic melanoma present this disease confined to one limb. Metastatic melanoma confined to a limb has been treated by Isolated Limb Perfusion (ILP), although the ILP technique unfortunately involves a complex and invasive operative procedure. A simplified procedure has been developed at the Sydney Melanoma Unit, Australia, by Thompson *et al.*/ such procedure is named Isolated Limb Infusion (ILI), which is essentially a low-slow ILP with equal results. This protocol is supported by BIOCANCER-Clinical research group of Minas Gerais-Brazil, established at the Alfa Institute of Hospital das Clínicas of the Federal University of Minas Gerais (UFMG). This protocol is designed to include 15 patients; we have presented the preliminary results of the first patient who has been submitted to an ILI's procedure at the Medical School of University of São Paulo (USP). MATERIAL AND METHODS: A 59-years-old man with a 3-year history of intact primary melanoma in his left posterior foot, a mass in his proximal left thigh and multiple in-transit metastases presented at the Clinical Hospital of Medical School of USP. Pre-operation status showed no metastatic distant disease and we suggested an ILI procedure. Standard radiological catheters were inserted percutaneously via the contralateral groin. A pneumatic tourniquet was inflated around the proximal limb, and the cytotoxic agents (melphalan and actynomicin D) were infused. The infuse was circulated for about 30 minutes, connected to a blood warming coil in the extracorporeal circuit. After 30 minutes, the limb was flushed, and the effluent was discarded. The limb tourniquet was then deflated and removed to restore normal limb circulation. RESULTS: Results show one patient in his first ILI procedure for a metastatic melanoma on his left posterior foot. This case used as a research project will include 15 patients for the

development of a melanoma research project. This project could be an important clinical option for patients who have a metastatic disease confined to the limb. This clinical protocol is open to include patients who could have this kind of disease and could get any clinical advantage of this innovative treatment. CONCLUSION: This protocol is being used as a surgical and clinical research investigation, which could potentially demonstrate the potential benefits from infusing cytotoxic drugs as regional chemotherapy as an alternative of isolated limb perfusion for treatment of metastatic melanoma. During this project we are planning to improve and adapt this methodology to get the best benefit for our patient conditions, and our hospital limitations and facilities.

P-26

Isolated Limb Perfusion with Hypertermia and Chemotherapy (ILP): 28 Cases of Initial Experience, How You Diminish Side Effects During Learning Curve

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OBJECTIVE: To anlyze 28 initial ILP of Hospital do Cancer focusing the complete response rate, complications associated with the procedure and how those could be minimized. MATERIAL AND METHODS: We analyzed retrospectively the 28 initial perfusions carried out at the Department, from 4/01 to 12/04. The perfusions had been indicated mainly to patients with in-transit melanoma metastases. Histology; response, relapses, complications, CPK dosage were analyzed. Statistical analysis was carried out using the program Statistical Package Social Sciences (SPSS) 10.0. RESULTS: Complete response was 42,90 % (12); 17.9 % partial (5); 17.90 % without response (5); in 6 cases it was not possible to evaluate the response (3 amputations caused by complications and 3 recent procedures). Maximum CPK in the postoperative varied from 14 to 45610. Among the 12 patients with complete responses, 5 had presented local relapse. Relapses occurred in average 10.60 months. Among the 28 perfusion procedures, 17 evolved with some type of complication. 4 patients evolved with need of amputation caused by tumor relapses. One died due to sepsis. Temperatures exceeding 40° C had never been used in the past; in two cases of amputation caused by complication it was possible to retrospectively notice that hyperthermia was a common cause. One patient was kept for 1 hour at 37° C prior to perfusion, waiting for the drug. The second patient was very fat and probably the probe reached only the subcutaneous tissue; temperature in the circuit was 42° C and probably the muscle temperature was higher than the measured one. In the third patient severe infection of incision caused artery thrombosis. DISCUSSION: ILP constitutes the best option for patients carrying melanoma with in-transit metastases in limbs, however such technique presented high morbidity. The learning curve can be better if some steps of the procedure are teatched.

P-27

Isolated Limb Perfusion with Melphalan for In-Transit Metastases

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INTRODUCTION: Hyperthermic isolated limb perfusion (HILP) is a treatment used for an aggressive form of metastatic melanoma occuring on limbs. Such form of advanced disease is usually presented as multiple nodules in areas surrounding the site from where the primary was excised. Their natural history, without treatment, is to increase in number and size, and the lesions often become ulcerated and foul smelling wounds. The best form of therapy is surgical excision of individual lesions when they are small; however, this approach is feasible when the total number of lesions and their scope is limited (1 - 5 lesions). Whenever the number of lesions exceedssuch limit, surgery is rarely feasible and rarely indicated due to the fact that most likely additional microscopic lesions are present along the extremity. The purpose of this study is to describe the experience with HILP for advanced melanoma. We report the success of this technique in treating a metastatic melanoma. MATERIAL AND METHODS: Four cases of in-transit malignant melanoma (stage IIIc) of lower limb, successfully treated with HILP, are reported. HILPs were carried out under spinal anesthesia in which the main artery and vein of the affected extremity are connected to a bypass circuit, to completely isolate blood flow to and from the limb. The bypass circuit uses a heart-lung bypass oxygenator and cardiac bypass pump to control oxygenation, temperature, and flow of blood within the limb. The limb is completely isolated from the remainder of the body, and it is possible to warm the blood and the extremity to a temperature of 40.5° C without warming the entire body. A high dose of chemiotherapy agent (MelphalanÒ 10 mg/L) is administered into the perfusion circuit to expose the extremity to high doses of Melphalan without exposing the entire body to the drug. The combination of heat and high-dose melphalan circulated in the extremity for one hour induces tumor regression. The operation usually lasts a total of 3 to 4

hours and most patients were discharged on the 4th day following surgery. Subsequent regression of tumor takes place over 2 - 10 weeks. RESULTS: All cases showed a remarkable suppression of growth for multiple metastatic melanoma nodules associated with pathological response. Side-effects, such as nausea, vomiting and leg discomfort, were reported for all the patients, however such conditions were completely reversible, with no treatment-related death. CONCLUSION: Isolated limb perfusion with melphalan is effective against melanoma in-transit metastases and is a very successful treatment to prevent amputation.

P-28
Lentigo Maligna: A Case Report

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INTRODUCTION: Lentigo Maligna (LM), through a long-term cumulative ultraviolet injury, is a potential precursor to lentigo maligna melanoma. The initial presentation of LM is a tan macule that extends peripherally, with gradual uneven darkening, over the course of several years. The spread is usually so slow that little attention is paid to this insidious lesion. Early clinical recognition is often complicated by frequently similar-appearing lesions such as solar lentigines, seborrheic keratoses, Bowen's disease, amelanotic melanoma and others. MATERIAL AND METHODS: In this abstract we describe a case of Lentigo Malignant Melanoma and diferential diagnosis. RESULTS: A 73-year-old woman with type I skin was being followed in our service for sun damage and actinic keratosis. She had a negative past clinical history and no familial reports of skin cancer. On physical examination, she had many lesions suggestive of actinic keratoses. An assymptomatic erythematous scaling plaque with discrete pigment on left leg measuring approximately 1,7 x 1,0 cm diameter was also observed. Clinical diagnosis hypothesis of Bowen's disease and actinic keratoses were made. Result of incisional biopsy showed a malignant melanoma in situ (histopathological type: lentigo maligna). Widening of the margins showed abscence of neoplasia. CONCLUSION: Malignant melanoma causes more than 60% of all deaths by skin cancer. This data emphasizes the importance of a precise recognition of disease. The LM most commonly affects the sun-exposed skin of head and neck, with a predilection for nose and cheek. Less common sites include arm, leg, and trunk. The conjunctivae and oral mucosae may become involved when a cutaneous LM spreads onto mucosal surfaces. Signs suggestive of a more locally advanced lesion include elevation, burning, itching, pain, or bleeding. In most cases the diagnosis of LM can be confused with other skin lesions. The case described a malignant melanoma with clinical aspects similar to Bowen's Disease. It illustrates the importance of a precise histopathological diagnosis in suspicious lesions, a correct therapeutical selection and a rational follow-up of high-risk populations.

P-29
Malignant Ciliary Body Melanoma

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INTRODUCTION: Ciliary body melanoma is a rare tumor in childhood, especially among black children. By reporting this case of a ciliary body melanoma, we intend to broach the difficulty of making the right diagnosis, as well as indicating the right surgical treatment, due to its rareness and also because this child patient was asymptomatic. We also want to broach the multidisciplinary position in this case. CLINICAL DESCRIPTION: The malignant ciliary body melanoma is rare in childhood, especially among black children. We report the case of a 7-year-old black child, who presented low visual acuity for 30 days. Ophthalmological examination revealed intra ocular ciliary body lesion. For this case an enucleation was indicated. DISCUSSION: The malignant ciliary body melanoma is rare in children, especially in black race. In this specific case, we report a 7-year-old black child, sent to this oncologic service by an ophthalmologist, who had diagnosed intraocular ciliary body lesion. After all exams, the diagnosis was made and the enucleation was indicated. The patient is being followed-up for 3 years, being submitted to revisions at every 4 months. The child is able to move the intra ocular prosthesis, after the eyeball musculature transposition. CONCLUSIONS: Malignant ciliary body melanoma is a rare tumor carrying a rare prognostic. Usually the diagnosis is late, due to its similarity to other eye disease. In this case, we also want to broach the importance of a multidisciplinary team, composed by a surgical oncologist, ophthalmologist and phychologist, in regards to enucleation indication and afterwards.

P-30
Malignant Melanoma in Childhood: a Case Report

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INTRODUCTION: Malignant melanoma is a rare tumor in children, whose association with giant congenital nevi is well described. The tendency of increased frequency observed in adults is not detected in this population and specific prognostic factors remain

to be studied. Presence of a second primary malignant tumor is very uncommon. MATERIAL AND METHODS: In this paper we report a case of giant congenital nevus–associated malignant melanoma in early childhood. RESULTS: A 5-year-old white girl presented with a giant congenital nevus, with a large dermatomal distribution (described as a "bathing trunk"). An associated sacral nodular lesion was detected and presented progressive growth and ulceration. Bilateral inguinal lymph node enlargement was clinically detected at that time. Biopsy diagnosed a sinovial sarcoma. Systemic primary chemotherapy was initiated and a complete clinical response was achieved. During systemic treatment, a new sacral nodular lesion developed. Excisional biopsy revealed a malignant melanoma arising from a giant nevus. Systemic staging was negative. At that point the patient was referred to our service. Sentinel lymph node evaluation and margins ampliation were performed. Right inguinal lymph node macrometastasis were detected and total lymph node resection was performed. Adjuvant immunotherapy was proposed. CONCLUSION: This case illustrates an unusual combination of rare primary malignant tumors in early childhood. Treatment strategies for melanoma in children are similar to those proposed for adults. The association of a second malignancy and specific clinical features turned this case into a therapeutical and diagnosis challenge.

P-31
Malignant Melanoma in Situ With Lymphnodal Metastasis: Case Report

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BACKGROUND: The melanoma in situ is confined to the epidermis and does not invade the basal layer. Metastasis can occur if there has been invasion growth below the layer of granular cells of the underlying epidermis. The melanoma can proliferate locally, disseminate to satellite lesions, either to extend lymphatic chains or blood vessels; it can invade any organ of the body, especially the lungs, liver, brain and bones. Lymphatic dissemination is the most common route for melanoma. Theoretically the dissemination of in situ tumors, including melanoma, is impossible. In this paper, we describe a case of melanoma in situ developing with lymphnodal metastasis, a conceptual paradox, as well as its clinical aspects, data drawn from the histopathological and immunohistochemical diagnosis, and surgical treatment undertaken. CLINICAL DESCRIPTION: A 66 years-old, white woman, was found to have pigmented right scapular lesion 4 years ago. The resection was carried out in March 2003, the histopathological diagnosis of which was malignant melanoma in situ. Slides were reviewed and confirmed. In June 2003 she was submitted to a wide resection with .5 cm margin, the slides for which were negative for residual lesion. In December 2004, a large right axillary adenopathy was verified. It was punctured and sent for analysis. The result was metastatic melanoma. Radical axillary lymphadenectomy was then carried out and revealed metastatic malignant melanoma. This was later confirmed by immunohistochemical testing. DISCUSSION: To explain this rare event, we have two main hypothesis: there was another site of melanoma with spontaneous regression or failure in analyzing the slides. Videodermatoscopy of the trunk and arms did not show any pigmented lesions or regression focus. In the histopathological test, 30 slides were made in a paraffin block and this still confirmed in situ melanoma. CONCLUSION: We are unaware of any literature with case reports referring to metastasis of in situ melanoma. However, in this case, exhaustive histopathological analysis was made of the cutaneous lesion and that confirmed the initial diagnosis. Meticulous histopathological and immunohistochemical tests of the lymphnodal neoplasia were also undertaken, corroborating the diagnosis. The possibility of invasive melanoma, with clinical and imperceptible regression in other areas, should also be considered.

P-32
Malignant Melanoma: Status of Primary Lesions Treated at a Reference Center

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INTRODUCTION: The malignant melanoma frequency is increasing in many Caucasian populations all over the World. Over 2005, The Instituto Nacional do Cancer estimates, for the state of Rio Grande do Sul, a frequency of 6.94 and 7.60/100.000 new cases of melanoma in men and women, respectively. The prognosis of non-metastatic patients (stage I and II) is determined mainly by Breslow rating, ulceration presence, number of mitoses, primary lesion localization, age and gender. MATERIAL AND METHODS: The epidemiological profile of malignant melanoma patients treated at a reference center in Porto Alegre was evaluated regarding prognosis criteria for primary lesion. Data was collected between April 2001

and May 2005 and 175 patients (total of 181 lesions) were detected. All patients were managed by a single surgical oncology team. Gender, age, race, anatomic sites and histopathological aspects of primary lesions were analyzed. RESULTS: Among 150 analyzed patients, all were Caucasians, 58.6% were women and the age varied from 18 to 80 years. The most frequent anatomic sites were extremities (50.6%). Superficial spreading was the most frequent histologycal type (71%). Thickness ranged from 0 to 20mm (average 1.78mm). Clark levels II, III and IV composed 80% of the cases. Ulceration was found in 19,9% and the regression was evident in 25%. Mitoses counting varied from 0 to 12 mitosis/10 optic fields (3.34 average). Most patients (75.6%) presented with mitosis counting under 4. CONCLUSION: Historical comparison of our data with current medical literature revealed a similar pattern of anatomic site presentation, Breslow level, Clark level, ulceration rate, regression frequency and mitosis counting.

P-33
Melanoma Brain Metastases in the Surgical Pathology Service of a General Hospital

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INTRODUCTION: Cerebral metastases are the most common cause of brain tumors among adults, occurring 5 – 10 times more frequently than primary tumors. The most common primary tumors are: lung (50%), breast (15-20%), melanoma (10%), and colon (5%). The frequency of cerebral metastasis (CM) in patients with melanoma ranges from 10% to 40% in clinical studies and around 66% in autopsy series. The presence of CM is usually associated with the existence of additional widespread visceral disease. These CM also led directly to patients' death in the majority of the cases. The aim of the present study is to correlate the morfological findings with the clinico-radiological features in melanoma patients with brain metastases. The evolution and survival time will also be considered, comparing them with those on the literature. Material and Method: A survey addressing cases of cerebral metastases derived from melanoma has been carried out, using the neuropathology registry of a General Hospital from January 1996 to January 2005. A research protocol was used to analyze the following data from patients' records: initial anatomopathological diagnosis (metastasis or primary tumor), anatomic site of primary tumor, onset time of CM, knowledge on primary site, the employment of radiotherapy and chemotherapy and primary tumor surgery, number of metastatic sites, interval between the CM diagnosis derived from melanoma and death. Results: We compiled data on 663 encephalic tumors in our study. Among them, 87 were metastases, 7 of which were from melanoma and 6 with known primary sites. Resection of the primary tumor was performed in 5 patients. Radiotherapy and chemotherapy were employed in 2 patients, who did not present increased survival time. Primary sites were trunk (4), popliteal fossa (1), face (1) and choroid (1). The metastases were multiple in 2 patients and solitary in 5. All presented extracranial metastases: lung (3), liver (2), lymph node (1), adrenals (1), spine (1) and breast (1). Median survival time after the diagnosis of brain metastasis was 8 months. According to the literature, the anatomic site of the primary tumor and the stage of disease at diagnosis are important prognostic factors. Solitary brain metastasis and the absence of lung or visceral metastases are associated with a better prognosis. Conclusion: Survival time for melanoma patients with brain metastases in the group of our study was similar to that reported on the literature. On the other hand, in the group of patients studied, there was no difference in the survival time between the patients with multiple and solitary metastatic lesions. However, in those patients who had a worse prognostic site of the primary tumor the brain metastasis appeared earlier.

P-34
Melanoma Diagnosis of Human Skin by Raman Spectroscopy

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INTRODUCTION: Melanoma is the most agressive skin cancer and is invariably fatal if left untreated. Melanoma removal at early stages is almost always curative and therefore early detection is essential. Removal of every pigmented lesion is unacceptable for the patient, espeacially in the case of multiple skin lesions or lesions localized in cosmetically important parts such as the face, due to risk of scarring. All disease states, without exception, are caused by fundamental changes in cellular and tissue biochemistry. The development of a technique to detect those changes in a noninvasive way is therefore crucial for melanoma detection. For such reason, many physical methods for in situ tissue analysis have been explored by investigating the molecular vibrational spectroscopy. Those methods have numbers of advantages, including minimal or no damage to the sample. Raman spectroscopy is a technique which provides information about the molecular structure of the investigated

sample. In this study, we have used FT-Raman Spectroscopy to investigate the alterations in the molecular structure that occurs in melanoma compared to the pigmneted nevi. MATERIAL AND METHODOLOGY: Samples of primary melanoma were obtained from 4 patients and the pigmented nevi were collected from 4 patients also submitted to excisional biopsy. Samples were snap frozen in liquid nitrogen and stored at 77K. A FT-Raman Spectrometer (RFS 100/S-Bruker Inc.) was used to Raman spectra collection using Nd:YAG laser at 1064 nm as the Raman excitation source. For each measurement, 250 scans were acumulated with a resolution of 4 cm^{1}. RESULTS: Visual inspection of the Raman spectra suggested that melanoma could be differentiated from pigmented nevi due to the decrease/increase of some Raman bands. Pigmentation increased the background level of the spectra, which was most pronounced in the region 1800 to 2500 cm^{1}. Melanoma could be differentiated from pigmented nevi due to the intensity decrease of Amide I protein band around 1660 cm^{1}. Moreover, melanoma showed an increased intensity of the lipid-specific band peaks around 1310cm^{1}. CONCLUSION: Significant differences between pigmented nevi and primary melanoma could be seen in FT-Raman spectroscopy, providing a novel non invasive method for rapid, automated skin cancer diagnosis on unstained skin samples.

P-35
Melanoma in Albinic Patient

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INTRODUCTION : Ocurrence of melanoma among patients is rare. To the best of our knowledge, only few tens of cases have been described on the literature. We report a case of an albinic woman presenting two skin lesions diagnosed as melanoma. CLINICAL DESCRIPTION: Albinic woman (white pink skin, snow white hair and horizontal nystagmus), 61 years old, with 2 skin lesions, both with gradual growth. The first one (3,0x2,5 cm) located on the left arm, presented circular shape and brown color, with dark area in the periphery. The second lesion (4,0x3,0 cm) was brownish and ill definided, also with dark area in its edge. Clinical diagnosis was melanoma, later confirmed histopathologically. DISCUSSION: Oculocutaneous albinism is an autossomal recessively disorder, characterized by altered melanin synthesis, with reduction or absence of this pigment in the skin, hair and eyes. The skin loses the protective effect of melanin, becoming vulnerable to the occurrance of sunlight induced malignant injuries (e.g., basal cell carcinoma). Interestingly, the ocurrence of melanoma is rare in albino, when compared to regular skin people with normal melanogenesis. CONCLUSION: The concept that melanoma development is dependent on the presence of melanocytes but not necessarily on melanogenesis. It is suggested that albino patients may have unknown systemic factors providing some protection against melanoma development.

P-36
Melanoma With Osteocartilaginous Differentiation: A Case Report

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INTRODUCTION: Osteocartilaginous differentiation is an infrequent variant of Malignant Melanoma (MM). The first case was described by Urmarcher C in 1984 and other 17 cases have been reported on the literature. AIM: Report clinical, morphological and immunohistochemical features of a MM case with osteocartilaginous differentiation. CASE REPORT: We present a 51 years old male patient with a Clark IV and Breslow index of 19.5 mm acral lentiginous MM located on the first finger of left hand. No osteocartilaginous component was seen in that specimen. The patient returned with axillary mass after 3 years, with no evidence of contact with bone structures. One year later, multiple lung nodules were detected. In the next year, new lung nodules appeared, with the same clinical features. Light microscopy showed that axillary lesion was composed of large atypical melanocytes with scattered chromatin, prominent nucleoli and frequent mitotic figures containing metaplastic bone trabeculae. The lung nodules revealed cellular characteristics resembling the original tumor in the periphery of the specimen and a central chondroid differentiation. IMMUNOHISTOCHEMISTRY: Primary tumor, axillary mass and the nodules revealed strong reactivity for S100 protein and vimentin. Furthermore, the lung nodules also showed focal positivity for HMB45 and Melan A antibodies. No cytokeratins or p30/32 expression was observed in all specimens. DISCUSSION: Osteocartilaginous differentiation in MM is a rare event. Literature describes a higher frequency in acral lentiginous types, especially in high grade Melanomas. Immunohistochemical reactions support this diagnosis. The most frequent expression observed is positivity for S100 protein and vimentin. Rare cases are positive for HMB-45 and Melan A antibodies. Cytokeratins and p30/32 reactions are always negative. This is helpful for the differential diagnosis with osteosarcoma and mesenchymal chondrosarcoma. Correlation with clinical aspects and ultrastructural findings may eventually be useful for this difficult diagnosis. CONCLUSION: Metastatic Melanoma must be conidered whenever a

chondroid and/or osteoid differentiation is present. This is the first Brazilian case reported to date.

P-37
Multiple Breast Nodules: Ductal Carcinoma in Situ Synchronic with Metastatic Malignant Melanoma

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INTRODUCTION: Breast cancer is the most common malignancy among women, accounting for 18% of all female cancers. Metastatic tumors to the breast are rare. The majority of lesions in the contralateral breast are second primary cancers, rather than metastases. Melanomas, lymphomas, lung, stomach and ovary cancers are common sources of metastases. MATERIAL AND METHODS: In this article we describe a case of metastasis of a solid neoplasm in the breast. RESULTS: A 60-years-old woman with breast nodules and a personal history of melanoma in the upper left arm in 1993 was evaluated in our hospital. Her mammogram showed microcalcifications in the upper quadrant junction of left breast. However, the nodule was well limited, and located in the inframmamary position with no mammographic representation. Both lesions were approached by excisional biopsy. The non-palpable lesion was stereotactic located and excised. Histologic examination revealed a ductal carcinoma in situ on the junction of upper quadrants and a metastatic melanoma on the palpable inframmamary nodule. Immunohistochemical analysis confirmed the results. CONCLUSIONS: There are nearly 500 cases reported on metastatic melanoma to the breast. Diagnosis should be confirmed by histologic examination. Treatment consists in excision of the lesion. This case may represent the first description of a primary in situ carcinoma of the breast coincident with a melanoma metastasis.

P-38
Sentinel Node Research to Melanoma in Children: Case Report and Proposal

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OBJECT: Melanoma is rare among children. We report our results and doubts in sentinel node biopsy procedures at our institution. Our proposal is to carry out a sentinel biopsy research in children and create a specific protocol for them. MATERIAL AND METHODS: 19 children with pigmented cutaneous lesions were treated from January 2001 to December 2004. Average age was eight years. All of them were submitted to surgical lesion resection (partial or total biopsy). After histology diagnosis of cutaneous in situ melanoma, using Breslow and Clark criterious, six patients were eligible for sentinel node biopsy research. The technique described by Morgan *et al.* for sentinel node biopsy was performed to three children. RESULTS: After histological studies of those 19 patients, six had a histological diagnosis of nevus; seven had diagnosis of melanoma in situ and six patients had melanoma. In four patients with in situ melanoma diagnosis, a wide local excision was performed. One case had a residual disease. Until 2004 only a wide excision was enough to treat those patients. Using the adult melanoma protocol the sentinel node biopsy was performed in three children. Only one case was positive and underwent to radical lymphadenectomy. That patient has an important lymph edema on the axillary area as complication. All patients are alive for over 3 years and free of disease. CONCLUSION: It is difficult to identify Spitz or in situ cutaneous melanoma in children carrying skin pigmented lesions. Nowadays that is necessary due to the high frequency of such this neoplasia at paediatric population. The sentinel node biopsy procedure selects a specific group to be submitted to a radical lymphadenectomy. Cutaneous located melanoma among children has been following the same clinical aspects of adults. A new specific and safe protocol with less morbidity to paediatric population would be usefull.

P-39
Outcome of 187 Patients with Cutaneous Melanoma, Clinical State I/II, and Histologically Negative Sentinel Lymph Node Biopsy

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OBJECTIVE: Identify recurrence among patients with cutaneous melanoma and histologically negative sentinel lymph node biopsy (SLNB), and compare overall survival between that group and patients with positive SLNB. MATERIAL AND METHODS: Between May 2000 and December 2004, at the National Cancer Institute (INCA), Brazil, 260 patients with cutaneous melanoma stage I/II underwent SLN mapping. All patients had histologically confirmed cutaneous melanoma with clinically negative regional lymph nodes. A SLN biopsy was offered whenever the patient's primary melanoma had a Breslow thickness > 1 mm, or < 1 mm and Clark IV

or V, or presence of ulceration or areas of regression. Sentinel lymph nodes were analyzed by imprint technique, standard hematoxylin-eosin staining and immunohistochemical stains (HMB45 and S100). Preoperative lymphoscintigrafhy, blue dye injection and intra operative probe, for radio-guided biopsy, was used in all cases. Median follow up was 22 months. RESULTS: Two hundred and sixty patients underwent SLNB for cutaneous melanomas; 187 (71.9%) had negative SLNB and 73 (28.1%) had positive SLNB. Recurrent disease was identified in 22 (11.8%) patients with negative SLNB. The first site of recurrence, in those patients, was local in 5 (2.7%), in-transit in 4 (2.1%), nodal in 6 (3.2%), and distant in 7 (3.7%). In the group without metastatic disease, 106 (60.5%) patients had Breslow tumor thickness < 2 mm and 69 (30.5%) had Breslow tumor thickness > 2mm, and recurrence occurred in 5.6 % and 20.2 %, respectively ($p < 0.006$). Histologically ulceration was not present in 154 (83.9%) and was present in 33 patients (16.1%); recurrence occurred in 10.3 % and 18.2 %, respectively ($p = 0.007$). Overall survival in three years for patients with negative SLNB and positive SLNB was 93% and 78 %, respectively ($p = 0.002$). CONCLUSION: In patients without SLN metastases, tumor thickness and histologycally ulceration were significant predictors of disease-free survival in our study. Patients with a positive SLN have reduced overall survival than those with a negative SLNB.

P-40
Primary Melanoma and Lymphatic Metastasis Diangnosed by Raman Spectroscopy

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INTRODUCTION: Lymphatic metastasis contributes to mortality caused by solid tumors. Whether metastasizing cancer cells reach lymph nodes via intratumor lymphatic vessels is unknown. The functional lymphatics in the tumor margin alone are sufficient for lymphatic metastasis and should be targeted therapeutically. While histopathology remains the gold standard for tissue diagnosis, several new diagnosis techniques are being developed relying on physical and biochemical changes which resemble or precede malignant change within the tissue. The aim of this study was to compare findings from FT-Raman spectroscopy *ex vivo* skin melanoma and lymphatic metastasis specimens in order to check if such technique could be used as an adjunct or alternative to histopathology in defining nodal involvement, without damaging the samples. Raman spectroscopy is a technique that provides information about the molecular structure of the investigated sample. In this study, we have used FT-Raman Spectroscopy to investigate the alterations in the molecular structure occuring in primary melanoma and lymphatic metastasis. MATERIAL AND METHODS: Samples of primary melanoma were obtained from 4 patients and the lymphatic metastasis was collected from 1 patient also submitted to melanoma treatment. All samples were snap frozen in liquid nitrogen and stored at 77 K. A FT-Raman Spectrometer (RFS 100/S–Bruker Inc.) was used to Raman spectra collection using the Nd:YAG laser at 1064 nm as the Raman excitation source. For every measurement, 250 scans were accumulated with a resolution of 4 cm^{-1}. RESULTS: Visual inspection of the Raman spectra suggested that melanoma and lymphatic metastasis spectra could be differentiated from each other due to decrease/increase of some Raman bands. Pigmentation increased the background level of the spectra, which was most pronounced in the region 1800 to 2500 cm^{-1}. CONCLUSION: Significant differences between primary melanoma and lymphatic metastasis could be seen in FT-Raman spectra, and we propose that Fourier transform Raman spectra could provide a new method for rapid, automated melanoma on unstained skin samples.

P-41
Profile of Patients Carrying Cutaneous Melanoma at a Reference Service in Western Santa Catarina/Brazil

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INTRODUCTION : Cutaneous melanoma (CM) has increased more rapidly over the last half century. Efforts to reduce the frequency of such disease have focused on identification and screening of individuals at high risk (primary and secondary prevention). However, in countries like Brazil the epidemiologic control is still precarious. No accurate data is available for frequency, prevalence and mortality in most places. In Santa Catarina State CM data is available just for populations living in the capital city. Most inhabitants of the Western region of the state, as well as remaining regions, are European descendents (Caucasians). That factor can lead to a high number of CM cases, therefore it becomes necessary to evaluate the clinical and pathological characteristics of lesions diagnosed and treated in those regions. MATERIAL AND METHODS: Within a period of three years, 126 patients with cutaneous melanoma were assisted at the Oncology Surgery Department - Oncology Service in Chapecó city – Santa Catarina/ Brazil. Since that service was initated they have been

using a modified protocol from the Brazilian Group for the Study of Melanoma. Variables were analyzed using an Epi Info 3.2.2 software. RESULTS: Among 126 patients, just 118 cases were eligible for the study, due to lack of follow-up. All patients were white and most of them were or still are submitted to a high sun exposure in their daily occupations. Considering the patients' home cities, there was in average 21.35 cases per 100,000 inhabitants within the time frame considered. Positiveness rate for sentinel nodes studied was 13 percent. There was survival difference (P<0.005) among the different stages at the moment of diagnosis when comparison was made between female and male sexes; lesion sites stratified for the female sex; radial and vertical growth phase patterns; narrow, intermediate and deep thicknesses (Breslow); presence or absence of vascular infiltration. During a 3-year follow-up period the global survival rate was of 75,3 percent (GRAPH). CONCLUSION : Western Santa Catarina state holds a high number of CM cases. Data shown refers just to a major oncologic reference service. Characteristics like type and color of skin, as well as color of hair and eyes, were important to explain such findings, since the white population is majority in that region (100% in the present study). CM occurred among young individuals and mostly female ones. Survival rate within a 3-year period for all patients was below the rates presented by different papers (75,3% *versus* mean 80%). Besides the fact that most patients had their diseases classified as stages I and II at diagnosis, their lesions presented relevant prognostic factors leading to poor survival (thick CM and/or CM with Clark IV level).

P-42*

Prognostic Evaluation of Cutaneous Melanoma Patients with Lymph Node Micrometastasis Treated at the Instituto Nacional de Câncer (INCA)

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OBJECTIVE: Along with the improvement in surgical technique for correct identification of sentinel lymph node (SLN), the search for occult metastasis has evolved remarkably in the past years with the implementation of new techniques for histopathologic investigation involving serial sectioning, the routine use of immunohistochemical staining and, more recently, molecular analysis (RT – PCR - reverse transcriptase – polymerase chain reaction). Therefore, occult metastases of increasingly smaller sizes are being detected in the SLN. Micrometastasis is defined as a lesion measuring less than 2 mm within a lymph node. Currently, those patients receive the same treatment employed to others with macrometastasis (occult metastases measuring more than 2 mm within a lymph node) – i.e. complete lymphadenectomy of the nodal basin. However, this group of patients could have a different prognosis and could receive a different treatment. The current study was conducted to elucidate this doubt and determine if the prognosis among patients with micrometastasis, macrometastasis and negative SLN biopsy (SLNB) differs in any aspect. MATERIAL AND METHODS: In the period from May/2000 to December/2004, 260 patients were submitted to SLNB at INCA. All presented Breslow tumor thickness >1mm or areas of regression, without evidence of lymph node metastasis. Among this group, 73 had positive SLNB, with 20 meeting the criteria set for micrometastasis. Those 20 patients were retrospectively analyzed evaluating overall survival (OS), disease free survival (DFS), and other characteristics in comparison with 53 patients carrying macrometastasis and 187 with negative SLNB. RESULTS: Among those 260 patients, 73 (28.1%) had positive SLNB, and in this group, 20 (27,4%), had micrometastasis. The mean follow-up was 22 months. In the group of patients with micrometastasis the percentage of death was 15%, compared with 24,5% in the group with macrometastasis and 7% in the group with negative SLNB. The difference between the patients with micro and macrometastasis was not statistically significant (p = 0,5115) in contrast with the group with micrometastasis and negative SLNB (p = 0,0064). The overall survival (OS) was 43 months against 42 among patients with macrometastasis and 49 in the group with negative SLNB. The disease free survival (DFS) was 37 months, and at the end of 48 months 63% had no evidence of disease. A recurrence rate of 30% (6 patients) was observed in this group of 20 patients - 3 with distant recurrence, other 2 in-transit and 1 patient presented with distant and in-transit metastasis. DFS rate among patients with micro and macrometastasis showed no statistically significant difference. The same didn't occur when we compared patients with micrometastasis and negative SLNB (p = 0,0179) and when we stratified these groups by Breslow tumor thickness (> 2 mm or < 2 mm) and histologically ulceration (present or absent), Comparing patients with similar characteristics, no statistically significant difference in the DFS was found between patients with micro and macrometastasis (p = 0,76, p = 0,32, p = 0,37 and p = 0,24) while between the group with micrometastasis and negative SLNB the difference in prognosis was significant (p = 0,018, p = 0,025 and p = 0,033). CONCLUSION: In our study, the group of 73 patients with positive SLNB had similar outcomes when comparing micrometastasis and macrometastasis. A statistically significant difference in DFS and OS was found between patients with micrometastasis and those with negative SLNB. These results suggest that patients with micrometastasis should be treated aggressively, as if they were in the

macrometastasis groups. In the future, after the prospective studies now in course are finished, and with better definition of micrometastasis, an individualized treatment could be achieved.
*awarded abstract

P-43
Restricted Mucosal Primary Esophagus Melanoma: an Extremely Rare Condition

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Melanoma involving the esophagus can be metastatic or primary. Have convincingly demonstrated melanocytes in the basal layer of the esophagus epithelium, indicating the potential for primary melanoma. Primary melanoma arising in the mucosa of the esophagus is an extremely rare condition. Metastatic melanoma of the esophagus is far more commom. The first histologically confirmed case of primary melanoma of esophagus was reported in 1952. Since then, there have been reports of aproximately 50 additional patients with primary melanoma. Metastatic involvement of periesophageal lymph node and/or viscera is commom at the time of diagnosis. Median survival of this group of patients is extremely short, i.e. 7.5 months, and long-term survival is extremely unusual. Only one patient has been reported to have had prolonged survival following resection. Esophagectomy with primary reconstruction is considered as the only potentially curative treatment, despite an aggressive surgical approach; however prognosis remains poor. A significant number of patients will not be candidates for resection due to regional or distant metastatic disease. Case report: We report one extremely rare presentation of primary esophagus melanoma restricted of mucosa, without metastasis regional or distant metastasis. Male, 52 years old, African-American. Three months of dysphagia associated with subesternal pain, without weight loss or bleeding. Endoscopy shows a 3-cm polypoid lesion, in middle third, irregular shape, nodular, pigmented and friable, involving 25% of esophagus lumen. Histopathological examination: mucosal melanoma, confirmed with imunohistochemistry, positive for Melan A, HMB-45 and S-100 and negative for citokeratins. Staging without evidence of distant metastasis, mediastinal lymph nodes or extra-esophageal involvement. Total esophagectomy was performed, with curative intent, mediastinal lymphadenectomy, laparoscopic liberation of estomach and cervical anastomosis esophagus-gastric. Histopathologic diagnosis: Melanoma with mucosal and submucosal infiltration, without vascular, neural or lymphatic invasion. Adventitia and muscular layer were tumor-free. No metastasis in 24 lymph nodes. Stage T1,N0,M0. Follow-up period was six months without evidence of disease.

P-44
Sentinel Lymph Node Biopsy (SLNB) in Cutaneous Melanoma: Analysis of 240 Consecutive Cases

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OBJECTIVE: Evaluate SLNB practical rules for melanoma and discuss indication and outcome of 240 patients. The study was carried out in order to evaluate the efficacy in finding the lymph node, practical ways to reach better results and pattern of metastases. MATERIAL AND METHODS: The analysis was performed prospectively, on a non-randomized basis, at a cancer referral center. Thickness was greater or equal to 1mm. Median age was 51 years, median thickness was 1.60 mm, ulceration was found in 30.4%. Median follow-up 27.81 months. Surgery was performed with preoperative lymphocintigraphy; immunohistochemistry subsequent to surgery. Statistical analysis consisted in comparing the need of gamma probe and the corresponding location, value of experience, need of immunohistochemistry, positivity compared with Breslow, causes for successful detection of lymph node and evolution. RESULTS: In every lymph node basin the percentage of successful detection was directly related to the use of probe, ($p = 0.002$). Success rate for finding the SL increased successively year-by-year. Analysis of lymph nodes revealed 12.5% positivity, according to the HE and 17.5% with immunohistochemistry (when SLN not found are excluded, positivity is 3,2% for the HE and 18,5% for HMB45). Immunohistochemistry increased positivity by 40%. Positivity was directly related to Breslow thickness ($p< 0.001$). Regional lymph node recurrence took place in four cases, all rescued by surgery. Two patients are dead due to the disease and two are alive without disease. In this group there was two cases that thesentinel lymph node was not found. CONCLUSIONS: The study shows the importance of the gamma probe in all lymph node basins, especially in the axilla and non-usual basins, as well as the importance of experience and immunohistochemistry. As a new procedure, it was possible to recognize the pattern of recurrence in follow up.

P-45

Sentinel Node in Malignant Melanoma: Experience of a Reference Center

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INTRODUCTION: Malignant melanoma (MM) is the most aggressive skin cancer. The histological evaluation of the primary lesion indicates if a surgical approach of the lymph nodes is necessary. The technique to be chosen for patients with negative clinic lymph nodes is the sentinel lymph node detection (SN). MATERIAL AND METHODS: Between July 2002 and May 2003, a single surgical oncology team in a reference center evaluated 90 patients (total of 91 lesions) with an established diagnosis of MM, with indication of SN detection and no positive clinical lymph nodes. The SN technique was executed with pre-surgical lymphoscintigraphy and transoperatory mapping with gamma probe. Blue patent V technique was also performed. The SN removed was fixed with formol and analyzed by histology (hematoxilin-eosin stain HE). Negative results for metastasis on HE were confirmed by immunohistochemical analysis. RESULTS: Among the 82 patients (total of 83 lesions), 64.6% were women and the age varied from 18 to 76 years. Primary sites were: 32.5% on back, 27.7% lower limbs, 20.5% upper limbs, 8.4% head and neck, 4.8% thorax, 3.6% lumbar region and 2.4% abdomen. Ulceration was found in 22.9%, regression in 39,7%, III and IV Clark levels in 79.5%. Breslow was between 0,1 and 2 mm in 68,7%. The number of SN found ranged from 1 to 5 (average of 2.2 nodes). Eleven patients (13,4%) in this cohort had positive sentinel nodes on HE. Adittional 5 patients (6%) were diagnosed as positive nodes after immunohistochemical analysis. CONCLUSION: Selective lymphadenectomy is a useful diagnosis tool for management of skin MM. It can detect, with high precision, the most probable site of the initial nodal metastasis. Rates found for positive nodes were similar to those described on the current literature.

P-46

Spect SETA-MIBI Imaging Evaluation of Melanoma Patients

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INTRODUCTION: Malignant melanoma is a relatively uncommon cancer of increasing frequency. The aim of the present study was to evaluate prospectively the clinical value of SESTA-MIBI SPECT scintigraphy for diagnosis of subclinical metastases. PATIENTS: We included 6 patients with advanced primary melanoma or suspicious metastatic disease. RESULTS: The SESTA-MIBI SPECT scintigraphy revealed intense accumulation of radiotracer in primary skin lesions and was very important to detect occult metastases. CONCLUSION: Along the last year our group studied the usefulness of SESTA-MIBI SPECT scintigraphy for evaluation of advanced and recurrent melanoma lesions. TScintigraphy could be helpful for evaluation of patients with malignant melanoma in the investigation of lymph nodal invasion, local recurrence, and metastatic spread.

P-47

Impact of GBM (Melanoma Brazilian Group) Over the Approach to Melanoma Patients

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INTRODUCTION: The GBM (Melanona Brazilian Group) – Regional Bahia was established in 1998, upon completion of a previous study demonstrating a significant impact on achievement of reduced number of inadequate previous manipulation due to discussions and information delivered during the monthly meetings held by GBM. This paper assesses such impact over a larger number of patient and larger follow-up period. MATERIAL AND METHODS: Retrospective data from two institutions and a single oncologist surgeon. Study period: 03/01/1992 to 03//31/2005, encompassing 529 consecutive cases with histopathological confirmation. Criteria for inadequate previous manipulation: primary surgery without anatomopathological study; chemical or electrical cauterization; inadequate margins; lymph node sampling and no radical lymphadenectomy in stage III. RESULTS: Follow-up loss was 1.46%. Median follow-up 5 years. Average age 52.4 years. In 1998 there were 117 cases and 38.5% of them had previous inadequate manipulation. Mortality rate was 31.1% when compared with 12.5% of appropriate manipulation. In 2002, a percentagem of 24,1% was found with previous inadequate manipulation. Relapse rate for that group was 25.8% compared to 2.1% for adequate manipulation ($p<10^{-17}$); mortality rate was 40.9% and 11.7% respectively ($p<10^{-11}$). When compared to the 529 cases, the inadequate manipulation rate was 13%, however mortality in this

group increased to 57%. Multivariate analysis with logistic regression revealed significant independent prognostic factors for mortality, as follows: stage (p <0.00000001), odds ratio 48.3 (IC 96% 10.7 – 88.5); followed by inadequate previous manipulation (p= 0.002), and odds ratio 5.23 (IC 95% 1.8 – 13.27). CONCLUSION: Increased mortality rate for previous inadequate manipulation, i.e. from 31,1% to 40,9% (currently at 57%) is related with larger follow-up, thus demonstrating this to be of significant impact. The rate reduction of inadequate previous manipulation rate from 38.5% to 24.1% and actually 13%, demonstrates the importance of continued and multidisciplinary medical education in our state, as well as the important role played by the GBM (Brazilian Group of Melanoma) on this historical change on melanoma approach.

P-48
Umbilical Melanoma: Case Report and Review of Anatomical and Therapeutic Aspects

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BACKGROUND: Malignant melanoma corresponds to 5% of cutaneous neoplasias. However, umbilical melanoma is a rare occurrence, with only 13 cases reported on the literature. The purpose of this article is to present a case of umbilical primary melanoma, discuss the anatomy and lymphatic drainage of this region, and 'the therapeutic aspects. CLINICAL DESCRIPTION: Three years ago, a 65 years-old white woman from Recife-PE, presented an umbilical pigmented nevus. It grew in size and one year ago the pigmentation increased. Examination showed depressed umbilical scarring completely filled by pigmented lesion with 1.5 cm, irregular borders and a depigmented area; no enlarged inguinal and axillary lymph nodes. Chest X-Ray, CT scan of abdomen and pelvis, and ultrasonography of groin and axillary lymphatic chains were normal. The pathological diagnosis after incisional biopsy was ulcerated malignant melanoma, without defining Breslow classification. Subsequently a complete excision of the lesion was performed; slide showed Breslow 8 mm and 1mm of margin. Lymphoscintillography showed three left axillary lymph nodes. During surgical widening, the peritoneum seemed disease-free. Lymphatic mapping identified three lymph nodes, one of them not coloured by vital blue. All the lymph nodes were free of metastasis on histopathological and immunohistochemical examination. DISCUSSION: Among the umbilical tumors, 80% are metastatic, the most common branch of which is the gastrointestinal tract. Melanoma is included in the other 20% corresponding to primary neoplasias of the umbilicus, which also include sarcomas, basal cell carcinomas and squamous cell carcinomas. From the embryological point of view, the umbilical scar can contain residues of several types of epithelial tissue of the gastrointestinal duct remaining from the omphalomesenteric duct. Anatomical aspects remain to be studied, such as the cylindrical form and the content within its thickness, skin, subcutaneous cellular tissue and peritoneum. Continuity with the round ligament and the urachus allows dissemination through those structures. Such facts justify the difficulty faced while establishing vertical or horizontal growth of Melanomas, as well as using Breslow measurements in that area. In addition to that, the lymphatic drainage, as a function of the classical definition of the Sappey Line, can be directed towards the axillary or inguinal areas, thus making it essential to carry out lymphoscintillography and lymphatic mapping. CONCLUSION: Umbilical melanoma is a rare occurrence. Due to its embryological and anatomical peculiarities, its clinical-histopathological evaluation entails difficulties and demands knowledge of local lymphatic drainage aspects in order to determine its pattern of dissemination. Lymphoscintillography and lymphatic mapping are imposed with sentinel lymph node research as exclusive means for identifying the routes of lymphatic drainage. In this case, we were able to define the drainage for the left axilla and to recover the corresponding lymph nodes, so that histopathological and immunohistochemical exams could be carried out.

AUTHOR INDEX

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