

## The Journal of Volu **Ophthalmic Photography** Volume 17, Number 1

Special Issue INTRAOCULAR TUMORS

April 1995



## The Journal of **Ophthalmic Photography**

Founded in 1977 by the **Ophthalmic Photographers' Society, Inc.** Don Wong. F.O.P.S., Founding Editor

## CONTENTS

|    | Retinal Hemangioma: A Genetic, Clinical and Photographic Study<br>Pamela S. Hulvey, CRA & Charles M. Vygantas, MD   | 5                   |
|----|---|---------------------|
|    | Radiation Retinopathy   |                     |
|    | Andrew Schachat, MD   | 11                  |
|    | Research Perspectives:  |                     |
|    | The Collaborative Ocular Melanoma Study<br>Michael P. Kelly & Karen M. Hahn, BAA.   | 18                  |
|    | <ul> <li>Immunotherapy of Ocular Tumors Using Lymphokine Gene Transfer</li> </ul>   |                     |
|    | Bruce Ksander, MD & Timothy G. Murray   | 36                  |
|    | Ophthalmic Photographers' Society   |                     |
|    | 1994 Scientific Exhibition  | 22 - 25             |
|    | Intraocular Tumors: Four Case Reports   |                     |
|    | Csaba Martonyi, FOPS, CRA; Ron Jones; Jonathan Wilders;   |                     |
|    | Richard Hackel, CRA, R. Grey Weaver, MD<br>& Constance A. Stanton, MD   | ~ ~ ~               |
|    | a Constance A. Stanton, MD  | 20 - 27             |
|    | Color Infrared Photography of Melanotic Lesions<br>Peter Breit  |                     |
|    |   |                     |
|    | Peter Dreit   | 30                  |
|    | Monochromatic Imaging of Choroidal Tumors   |                     |
|    |   |                     |
|    | Monochromatic Imaging of Choroidal Tumors<br>Brad C. Clifton, BA<br>Technique of Fluorescein Angiography for the Diagnosis  |                     |
|    | Monochromatic Imaging of Choroidal Tumors<br>Brad C. Clifton, BA  | 32                  |
|    | Monochromatic Imaging of Choroidal Tumors<br>Brad C. Clifton, BA<br>Technique of Fluorescein Angiography for the Diagnosis<br>of Ciliary Body Malignant Melanoma<br>Mike Gerkovich, CRA & Steve Moser, CRA<br>Fluorescein Angiographic Findings in Retinal Astrocytoma  | 32                  |
|    | Monochromatic Imaging of Choroidal Tumors<br>Brad C. Clifton, BA<br>Technique of Fluorescein Angiography for the Diagnosis<br>of Ciliary Body Malignant Melanoma<br>Mike Gerkovich, CRA & Steve Moser, CRA  | 32                  |
| Ei | Monochromatic Imaging of Choroidal Tumors<br>Brad C. Clifton, BA<br>Technique of Fluorescein Angiography for the Diagnosis<br>of Ciliary Body Malignant Melanoma<br>Mike Gerkovich, CRA & Steve Moser, CRA<br>Fluorescein Angiographic Findings in Retinal Astrocytoma<br>in a Patient Without Other Signs of Tuberous Sclerosis  | 32<br>              |
|    | <ul> <li>Monochromatic Imaging of Choroidal Tumors<br/>Brad C. Clifton, BA</li> <li>Technique of Fluorescein Angiography for the Diagnosis<br/>of Ciliary Body Malignant Melanoma<br/>Mike Gerkovich, CRA &amp; Steve Moser, CRA</li> <li>Fluorescein Angiographic Findings in Retinal Astrocytoma<br/>in a Patient Without Other Signs of Tuberous Sclerosis<br/>Anton Haas, MD, Klaus Müllner, MD, Jutta Berglöff, MD &amp; Sabine Gert</li> </ul>                                      | 32<br>38<br>42<br>4 |
| C, | <ul> <li>Monochromatic Imaging of Choroidal Tumors<br/>Brad C. Clifton, BA</li> <li>Technique of Fluorescein Angiography for the Diagnosis<br/>of Ciliary Body Malignant Melanoma<br/>Mike Gerkovich, CRA &amp; Steve Moser, CRA</li> <li>Fluorescein Angiographic Findings in Retinal Astrocytoma<br/>in a Patient Without Other Signs of Tuberous Sclerosis<br/>Anton Haas, MD, Klaus Müllner, MD, Jutta Berglöff, MD &amp; Sabine Gert</li> <li>EDITORIAL / ABOUT THE COVER</li> </ul> |                     |

## About the Cover

"Tapioca Melanoma of the Iris"

This award-winning photograph was taken by Rosario Bate, CRA, COT. The patient was referred to Seymour Brownstein, M.D. at the University of Ottawa Eye Institute for evaluation of an elevated iris lesion. The pair of images depicts a fluorescein gonio-angiogram recorded digitally, and a relief map of this image using a computer enhancement technique.

The Topcon TRC 50I camera was used in conjunction with the Topcon Imagenet System for the fluorescein gonioangiogram. A Goldmann three-mirror lens was used to view and photograph the lesion. The camera was set at the 20 degree angle with the "A" diopter setting. The diagnostic lens was placed on the eye and the optimal view obtained just before the red-free photographs and injection of the dye. Photographic sequencing was planned and preparation of materials for dye injection completed well in advance to minimize the length of time the diagnostic lens remained on the eye. At the completion of the fluorescein gonio-angiogram, a fluorescein image was enhanced using the "relief map" found in the "tool box" of the Imagenet software. Rosario Bate has used this enhancement in several disorders where elevation is involved, including tumors, and finds it helpful as a teaching modality.

The "relief map" is an enhancement tool that allows an image to appear raised or "embossed." This is accomplished by suppressing or eliminating the tonality within the image and tracing its edges in dark gray or black. The image can also be viewed in reverse, similar to that of reversed stereo images.