



## The pseudogliucomas

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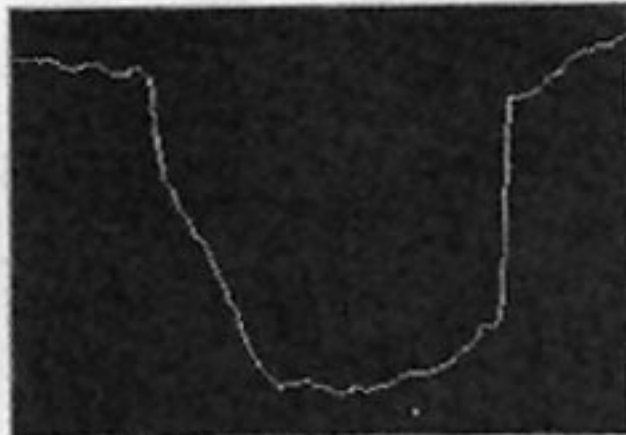
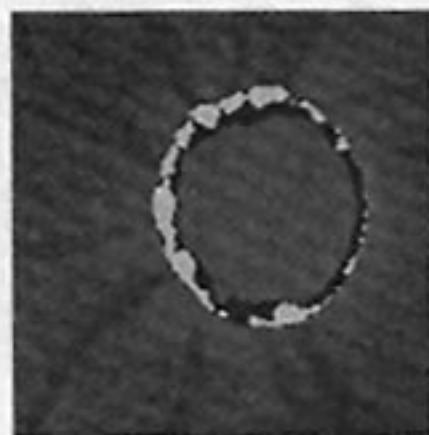
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### Abstract

**Purpose:** To study the differences between different pseudogliucomas and advanced glaucomatous optic nerve head damage. **Materials and methods:** Confocal tomography was performed in patients with advanced glaucoma (phase 4, perimetric period), Megalopapilla, optic nerve head atrophy produced by Anterior Ischemic Optic Neuropathy, with Meningioma of the optic nerve sheaths and with non functional adenoma. Examinations were performed with the Heidelberg Retina Tomography (longwave; 680 nm) using the new standard reference plane. Each eye was also examined with fundus biomicroscopy. O. N. H. parameters were measured and compared between the different cases. **Results:** While the 4 different diseases are characterized by a great cupping and apparently important neuroretinal rim reduction, the analysis with confocal tomography detected significant differences and particular features for each of these diseases. **Conclusion:** Confocal tomography is very useful in order to distinguish between true glaucomas and pseudogliucomas.

**ADVANCED GLAUCOMA (PERIMETRIC PERIOD)**

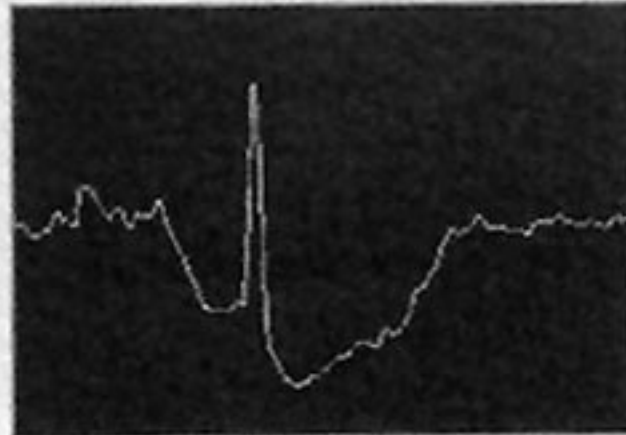
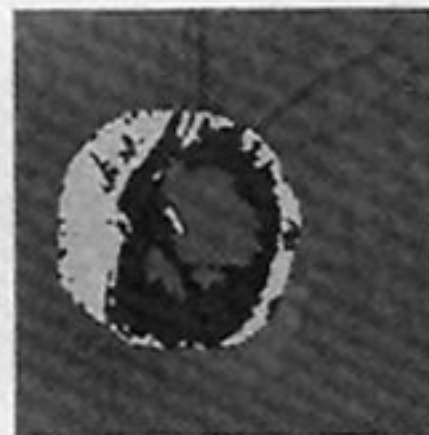
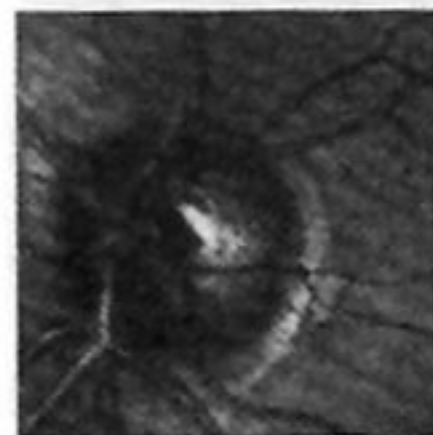
Increased cup volume and area. Reduced rim volume and area. Normal disc area.



Disk Area:	1.788 mm <sup>2</sup>
Cup Area:	1.228 mm <sup>2</sup>
Cup/Disk Area Ratio:	0.687
Rim Area:	0.568 mm <sup>2</sup>
Height Variation Contour:	0.136 mm
Cup Volume:	0.838 cmm
Rim Volume:	0.861 cmm
Mean Cup Depth:	0.636 mm
Maximum Cup Depth:	1.894 mm
Cup Shape Measure:	0.859
Mean RNFL Thickness:	0.186 mm
RNFL Cross Section Area:	0.584 mm <sup>2</sup>

**MENINGIOMA OF THE OPTIC NERVE SHEATHS**

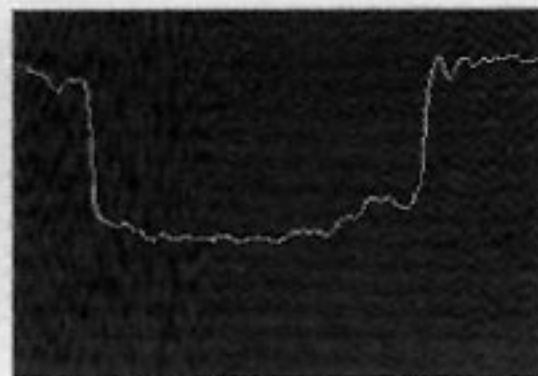
Apparently increased cup, with ectatic of the venous vessels, protruding towards the vitreous body.



Disk Area:	1.876 mm <sup>2</sup>
Cup Area:	0.342 mm <sup>2</sup>
Cup/Disk Area Ratio:	0.182
Rim Area:	1.534 mm <sup>2</sup>
Height Variation Contour:	0.281 mm
Cup Volume:	0.822 cmm
Rim Volume:	0.379 cmm
Mean Cup Depth:	0.198 mm
Maximum Cup Depth:	0.453 mm
Cup Shape Measure:	-0.185

### NON FUNCTIONAL ADENOMA

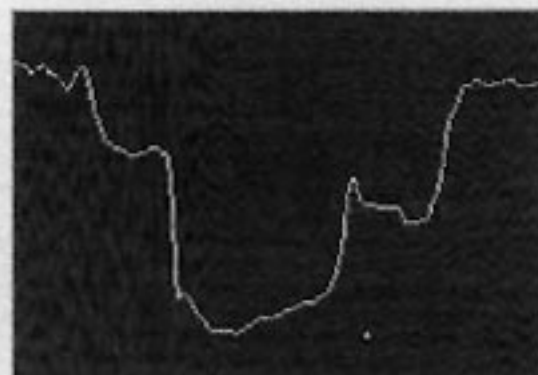
Increased disc area, abnormal cup volume and area. AT shows non functional adenoma.



Disk Area:	3.829 mm <sup>2</sup>
Cup Area:	1.525 mm <sup>2</sup>
Cup/Disk Area Ratio:	0.504
Rim Area:	1.584 mm <sup>2</sup>
Height Variation Contour:	0.275 mm
Cup Volume:	0.848 cmm
Rim Volume:	0.278 cmm
Mean Cup Depth:	0.514 mm
Maximum Cup Depth:	0.892 mm
Cup Shape Measure:	0.051
Mean RNFL Thickness:	0.172 mm
RNFL Cross Section Area:	1.064 mm <sup>2</sup>

### MEGALOPAPILLA

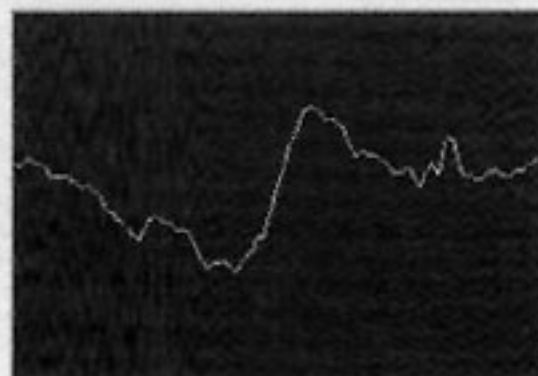
Increased disc area, abnormally high cup volume and area, with normal rim volume and normal visual field.



Disk Area:	2.644 mm <sup>2</sup>
Cup Area:	0.838 mm <sup>2</sup>
Cup/Disk Area Ratio:	0.314
Rim Area:	1.815 mm <sup>2</sup>
Height Variation Contour:	0.344 mm
Cup Volume:	0.258 cmm
Rim Volume:	0.411 cmm
Mean Cup Depth:	0.289 mm
Maximum Cup Depth:	0.887 mm
Cup Shape Measure:	-0.216
Mean RNFL Thickness:	0.256 mm
RNFL Cross Section Area:	1.479 mm <sup>2</sup>

### O.N.H. ATROPHY PRODUCED BY A.I.O.N.

Hemi cupped disc with hemi disc edema. Visual field doesn't match with glaucomatous damage.



Disk Area:	1.685 mm <sup>2</sup>
Cup Area:	0.288 mm <sup>2</sup>
Cup/Disk Area Ratio:	0.175
Rim Area:	1.324 mm <sup>2</sup>
Height Variation Contour:	0.485 mm
Cup Volume:	0.014 cmm
Rim Volume:	0.391 cmm
Mean Cup Depth:	0.148 mm
Maximum Cup Depth:	0.392 mm
Cup Shape Measure:	-0.167
Mean RNFL Thickness:	0.245 mm
RNFL Cross Section Area:	1.107 mm <sup>2</sup>