
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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E.O.S. March 2007

Assessment Of Progression O.A.G.

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Assessment Of Progression O.A.G.

- IOP
- Visual Field
- **Optic Nerve Head Structural Changes**
- **Nerve Fiber Layer Thickness**
- Optic Nerve Head Dimensions

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I.O.P.

IOP in Egyptians above the age of forty is 15.4 mmHg in males and 15.9 mmHg in females. This increases to 16.1 mmHg in the 61-70 years age group.

Ocular hypertension and glaucoma suspect should be considered with $IOP \geq 23$ mmHg

Glaucoma should be considered when IOP is above 26 mmHg

Shiaty 2005



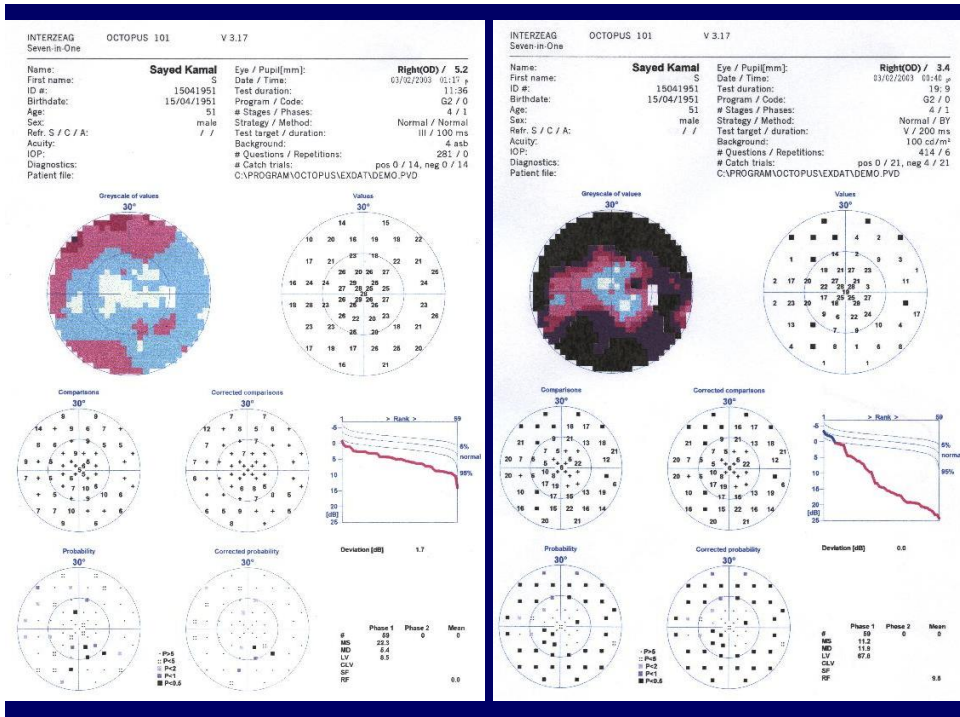
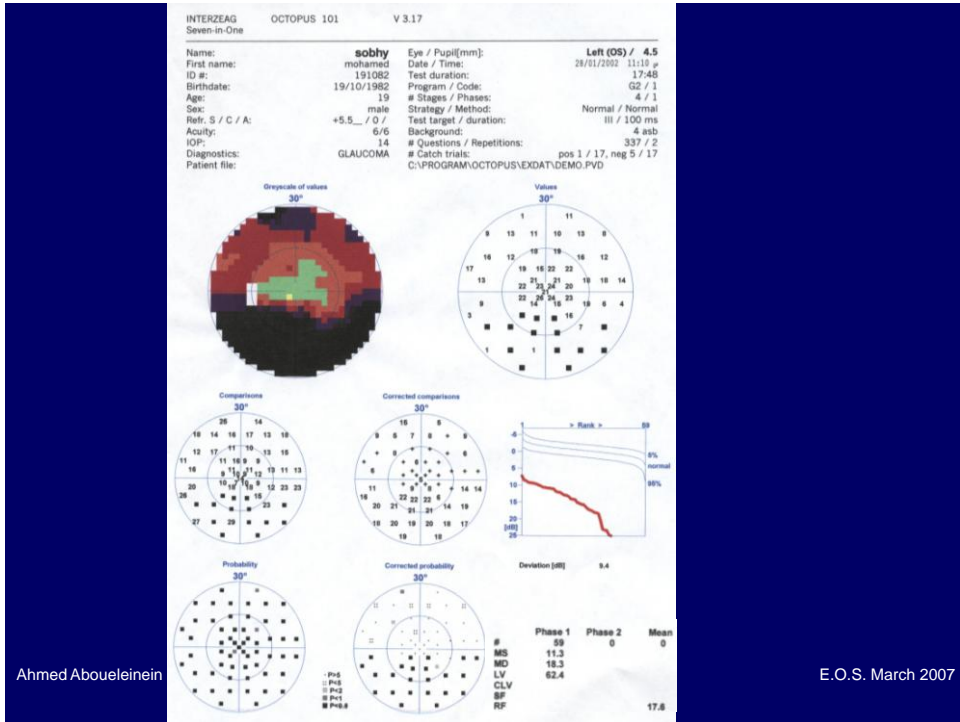
Target IOP

Limitations of IOP

- Corneal thickness
- Fluctuations
- Risk factor

Visual Field

- Subjective
- Nerve fiber layer damage earlier than visual field defect
- Short wave Automated Perimetry (SWAP) → limitations

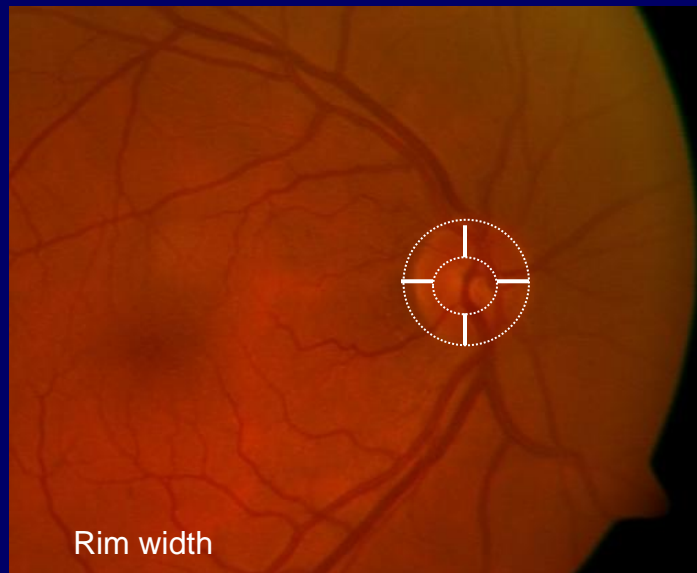


Optic Nerve Head Structural Changes

- Photography – Drawing

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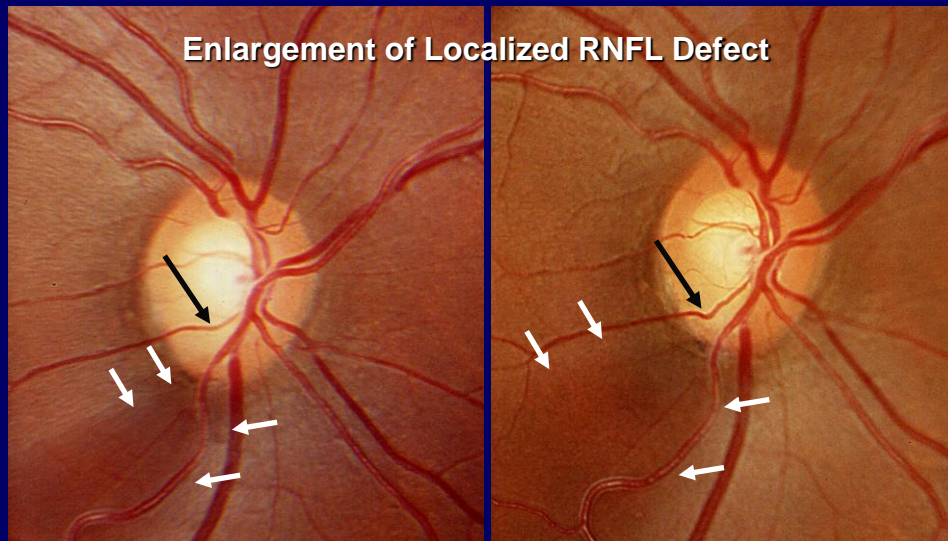


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ISNT RULE

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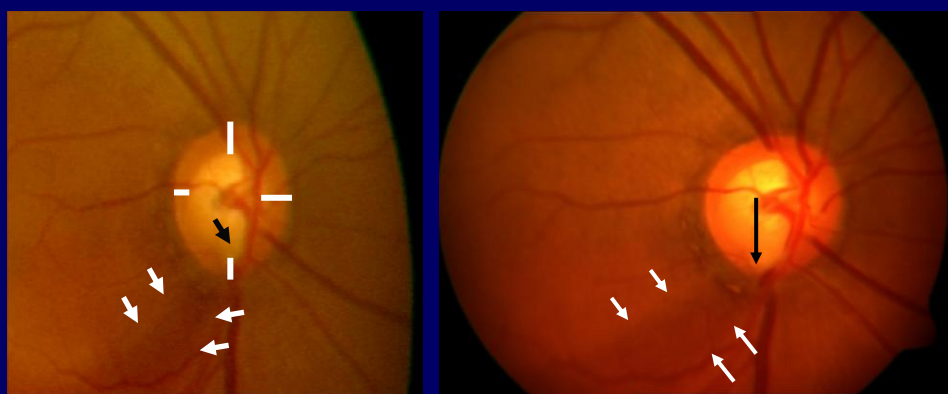
Progressive Rim Thinning



©2003, Remo Susanna Jr, MD

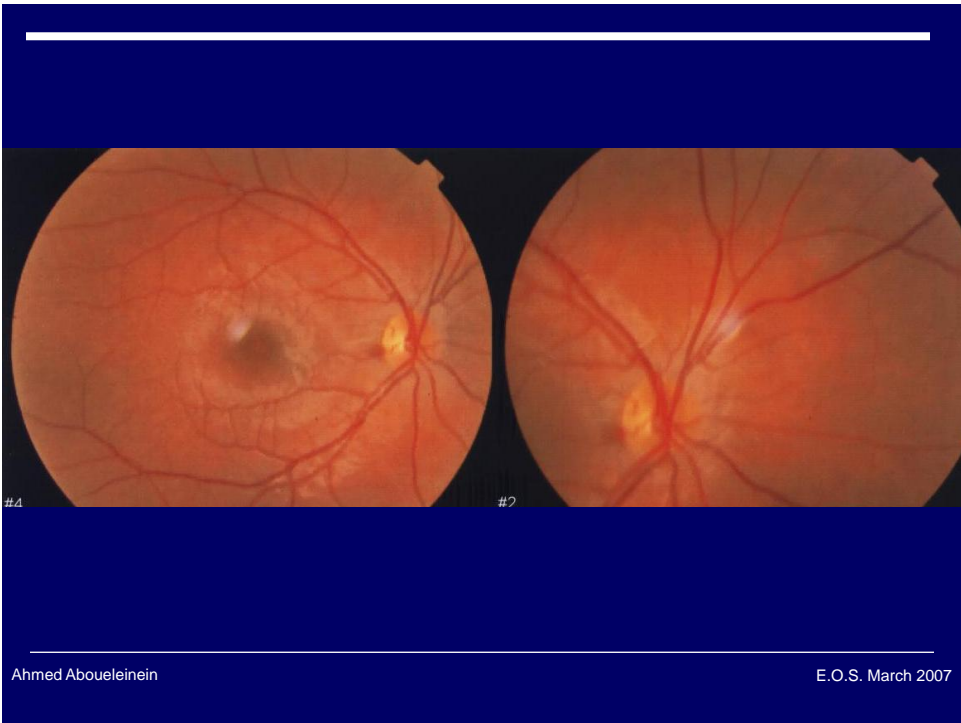
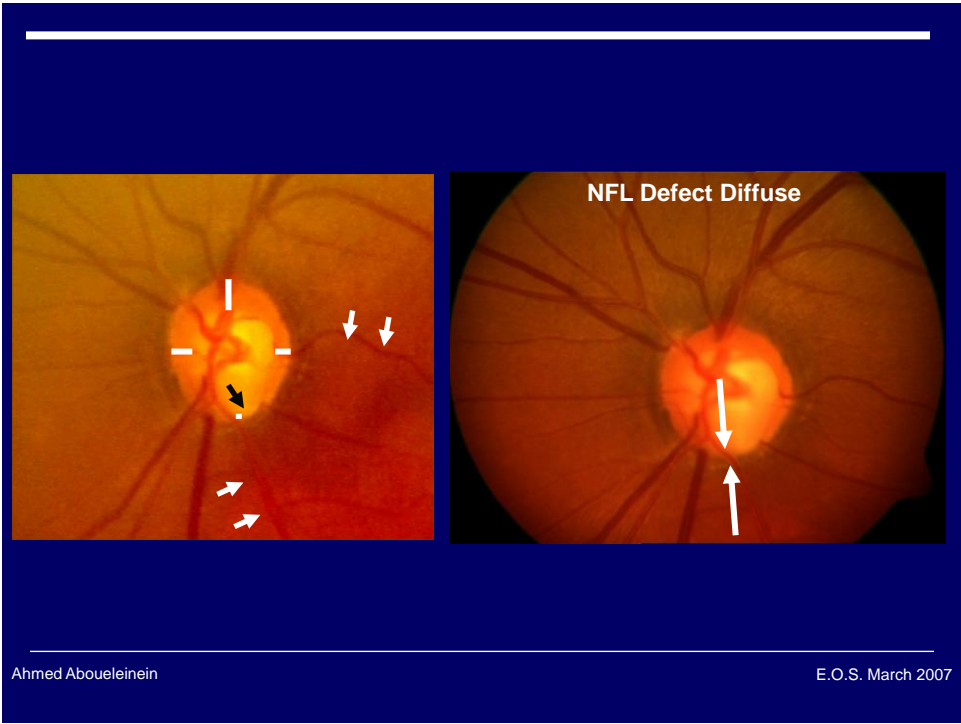
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4 Years



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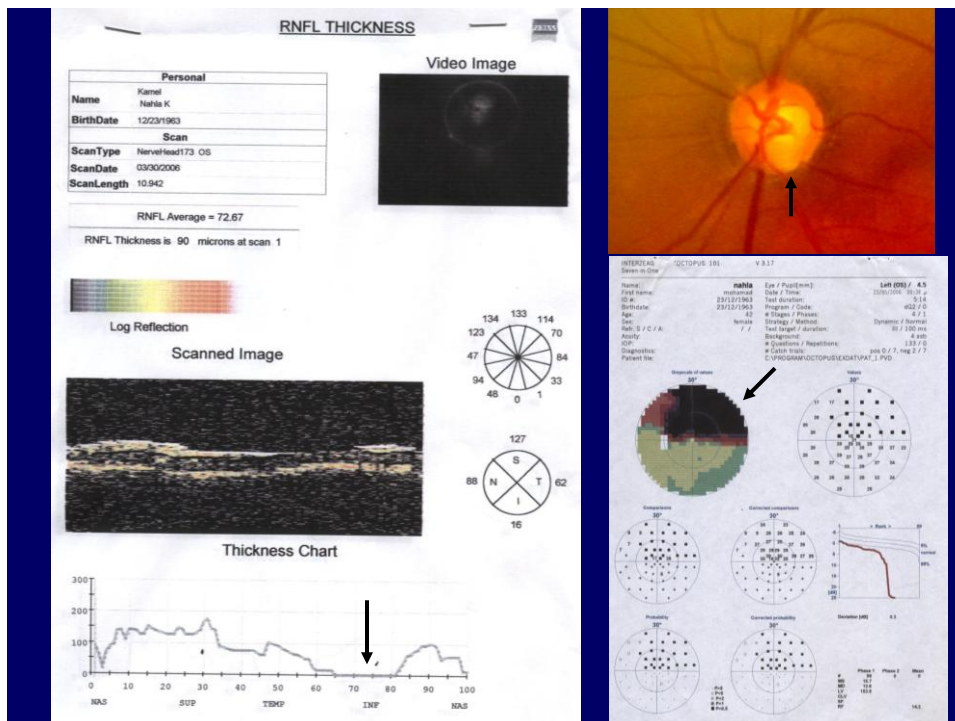


Nerve Fiber Layer Thickness Optic Nerve Head Dimensions

- OCT
- HRT
- Limitations
- Quantitative Assessment

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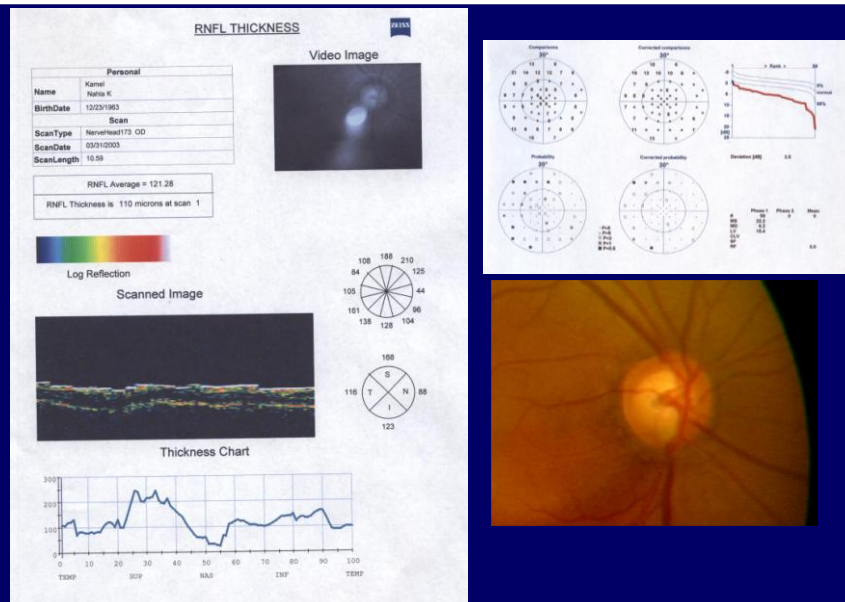


Assessment of Progression

- VF Progression: reproducible worsening of at least 2 dB in the VF mean deviation.
- OCT progression at least 20 μ m
- OCT progression alone 22%
- VF progression alone 9%

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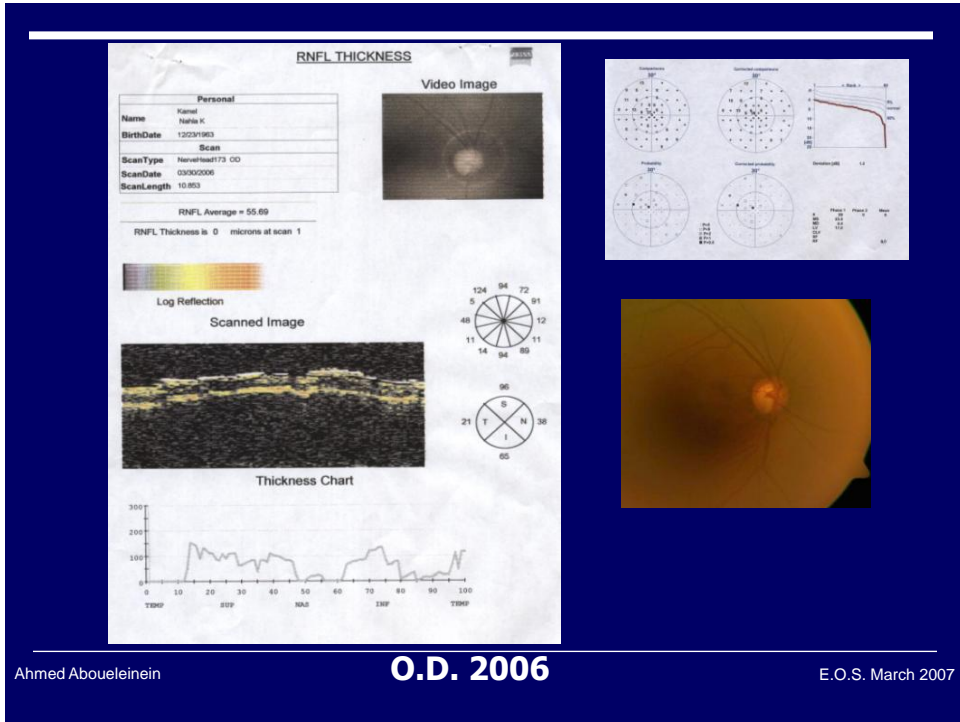
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O.D. 2003

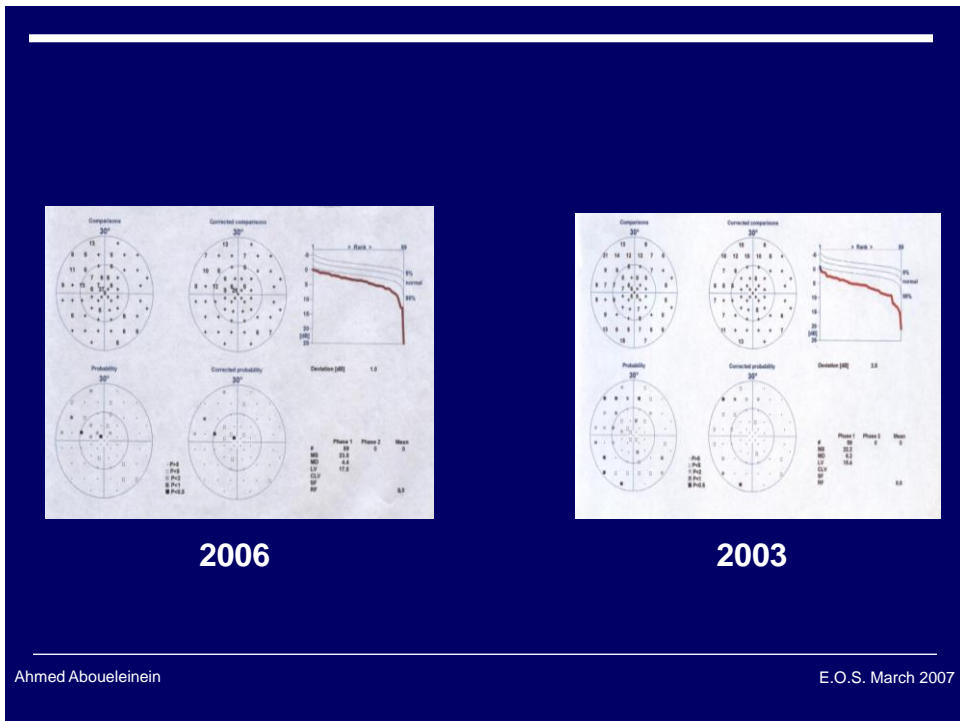
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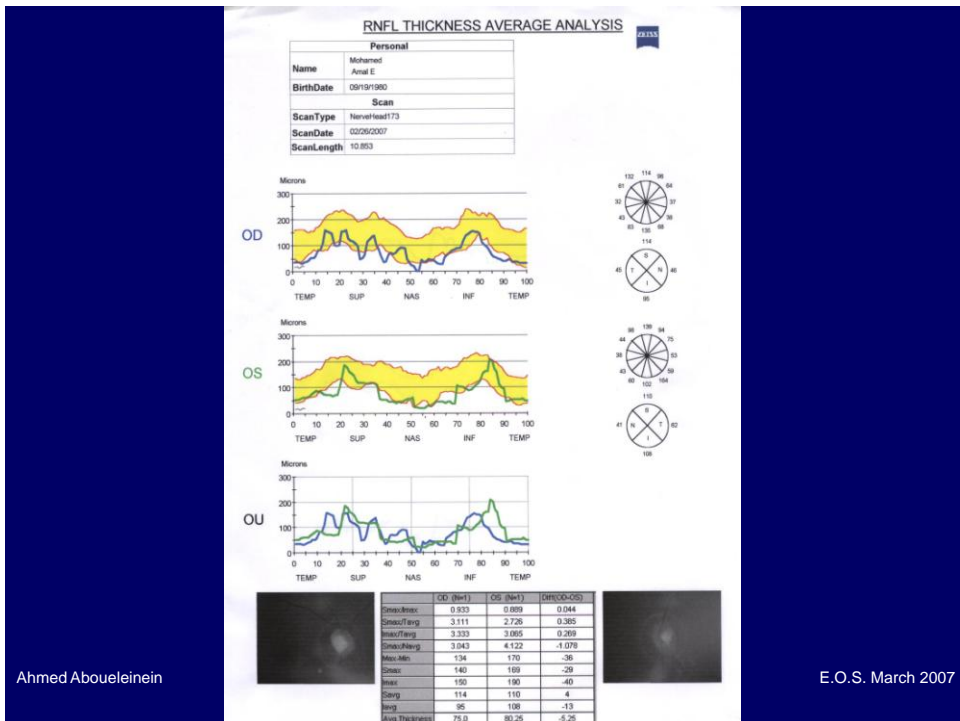
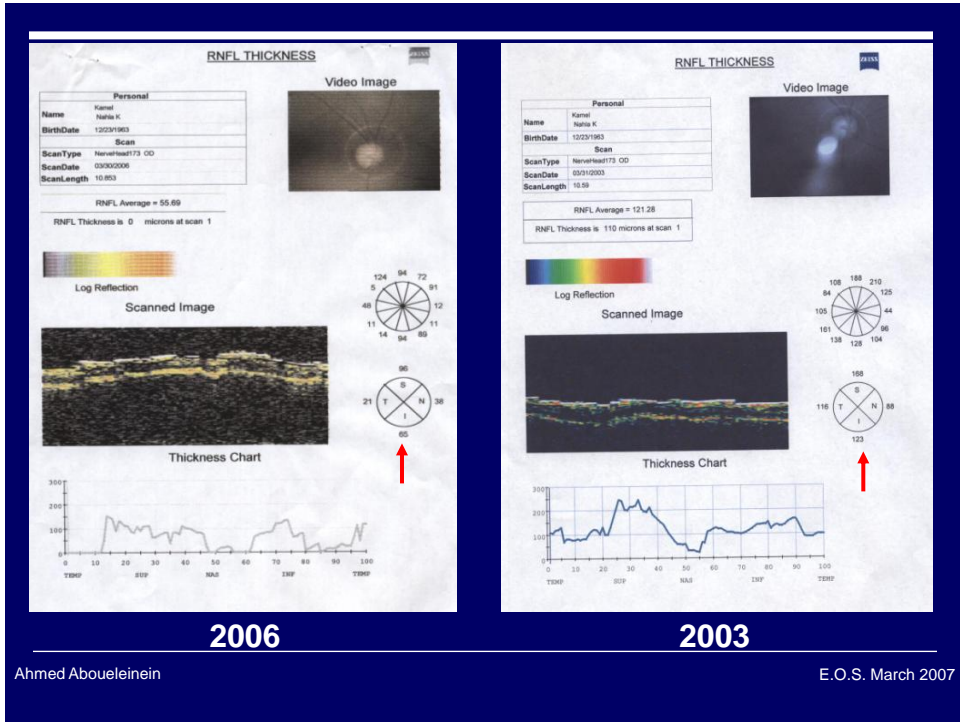
O.D. 2006

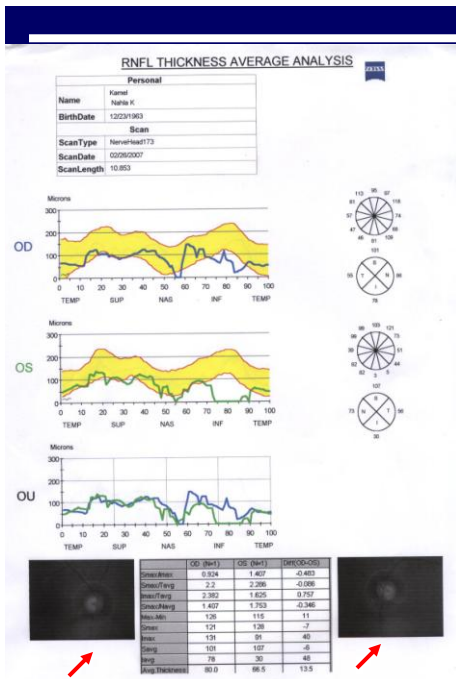
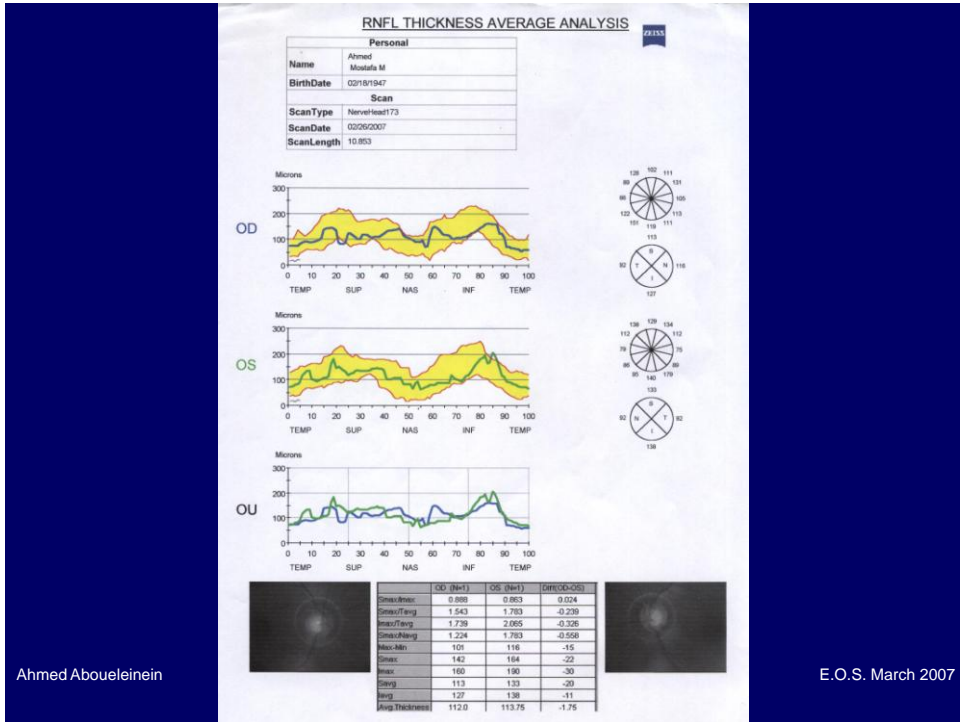
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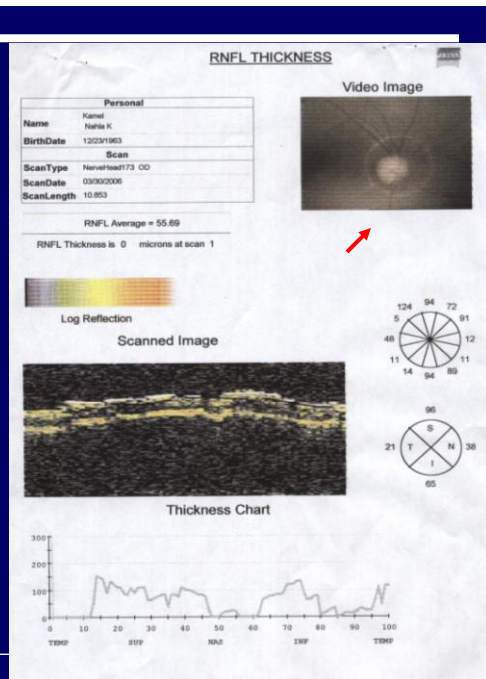
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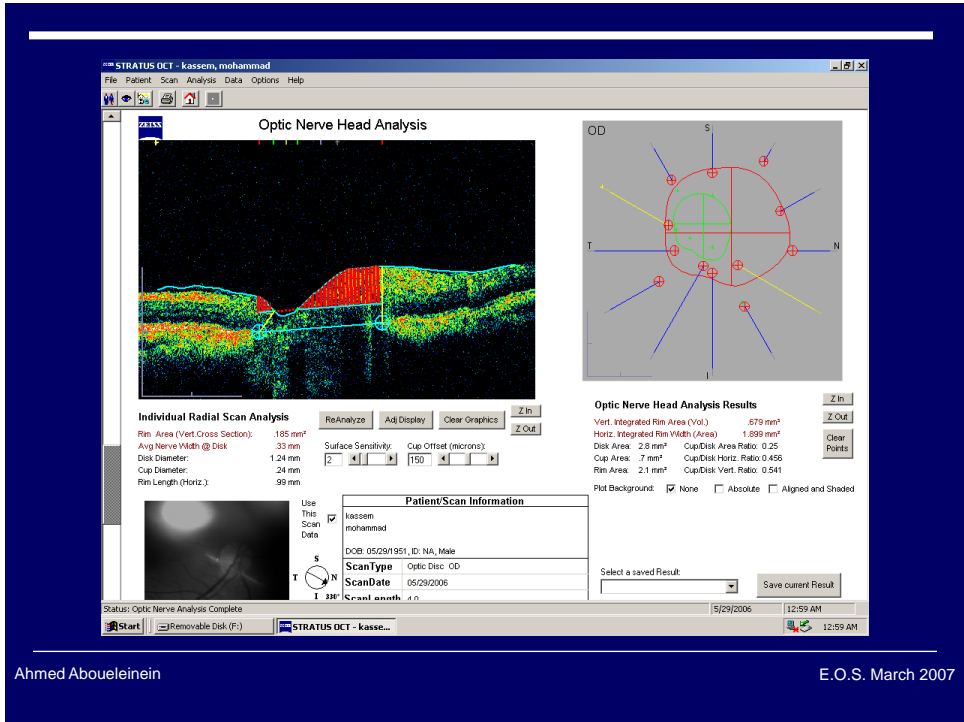




2007

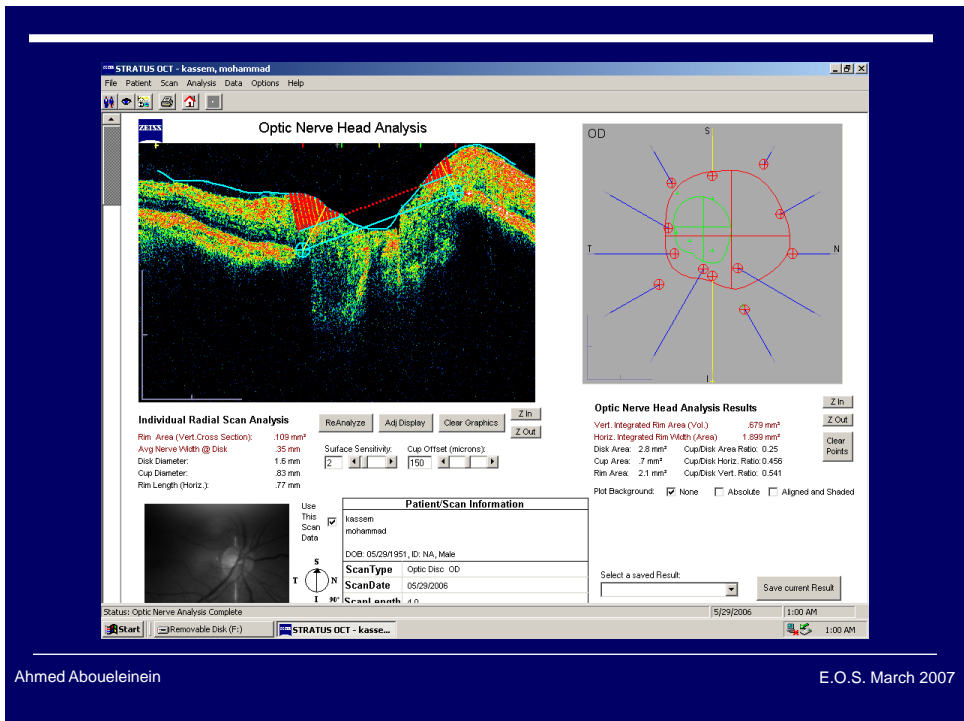


2006



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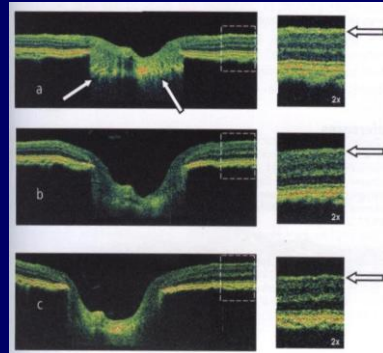
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New Techniques

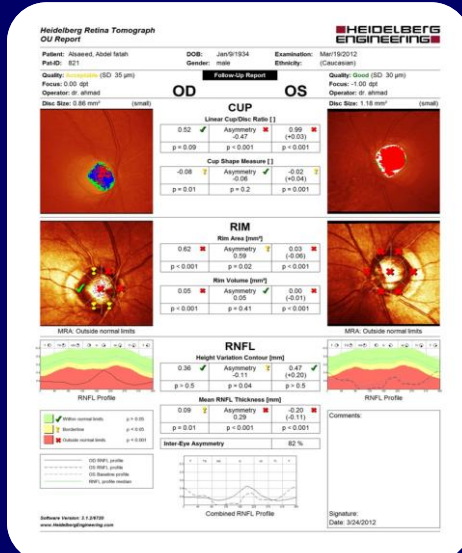
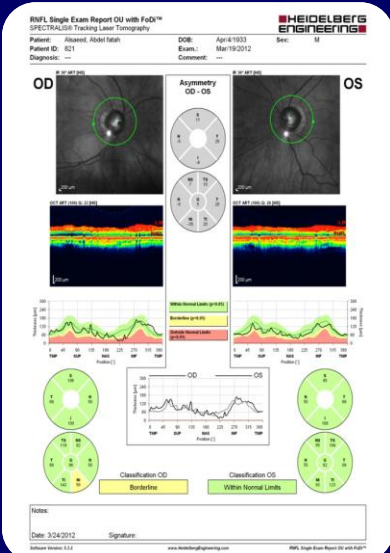
- Ultra-high resolution OCT

2-3µm resolution
10-15µm in the
standard OCT



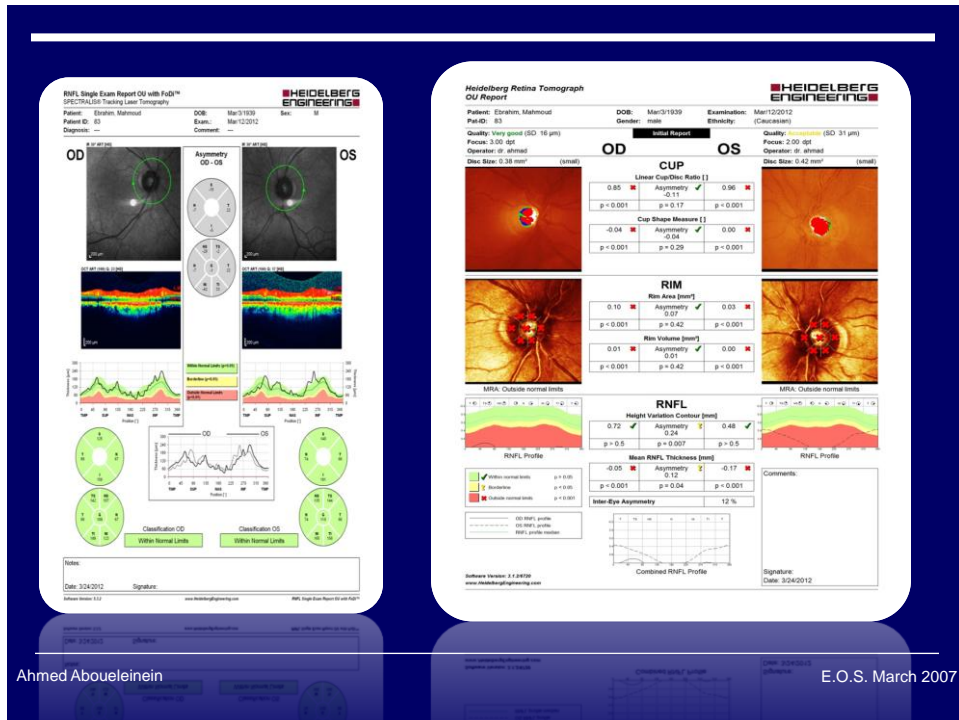
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Proper Assessment

- Reproducible change
- Same Machine every time
- Same criteria of examination
- Several tools better in advanced cases
- Better quantitative assessment

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Thank You



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