

Ocular Myasthenia: Clinical Presentations

- *Ptosis*
- *Ophthalmoplegia*
- *Ocular Motor Nerve Paresis*
(*III, IV, VI Nerve paresis*)



- 35 years ,male presented with Sudden onset of vertical Diplopia and upward deviation of L eye in primary position..6 month
- Diplopia on down and inward gaze with torsional element increasing on right gaze
- **Intermittent** initially
- Later become permanent

Ocular Examination



- Slight face turn to right
- **Left hypertropia** 15 PD, increased to 70 PD on down gaze
- **VA**..20/20 BE e normal colour vision
- **Pupil**..5mm/Normal reacting/no RAPD
- **Fundus**--NAD

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Extra ocular movements



Underaction Left SO



Overaction of Left IO

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Parks Three step test



- **STEP 1**
- left hyperdeviation in primary position when right eye fixating
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- **STEP 2**
- Hypertropia increased on right gaze



- **STEP 3** Hypertropia inc on
- ipsilateral head tilt

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Positive Bielschowsky test



Absence of right
hyperdeviation on
contralateral head tilt



Increase in left
hyperdeviation on ipsilateral
head tilt

Diagnosis: *L IV Nerve Palsy*

D/D: Sudden onset, in an adult:

- Trauma
- Intracranial SOL
- Demyelinating disorder
- Ocular Myasthenia
- Diabetes, Hypertension

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Diagnosis

Since the patient did not have H/O Head injury, headache, DM, HTN and other neurological symptoms

BUT had H/O Of **intermittency** and **easy fatigue ability** , we proceeded with

Prostigmine test

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Prostigmine Test



Improved hypertropia

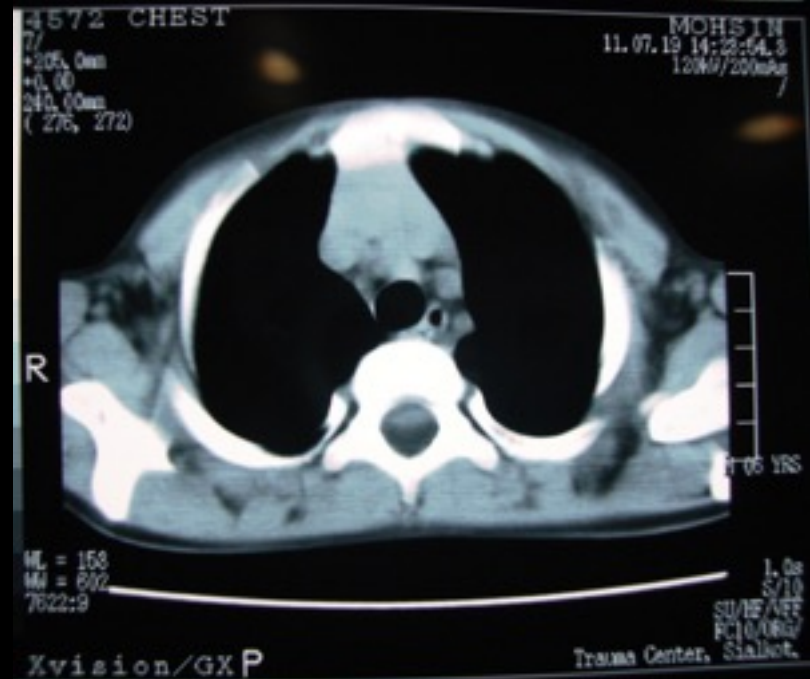
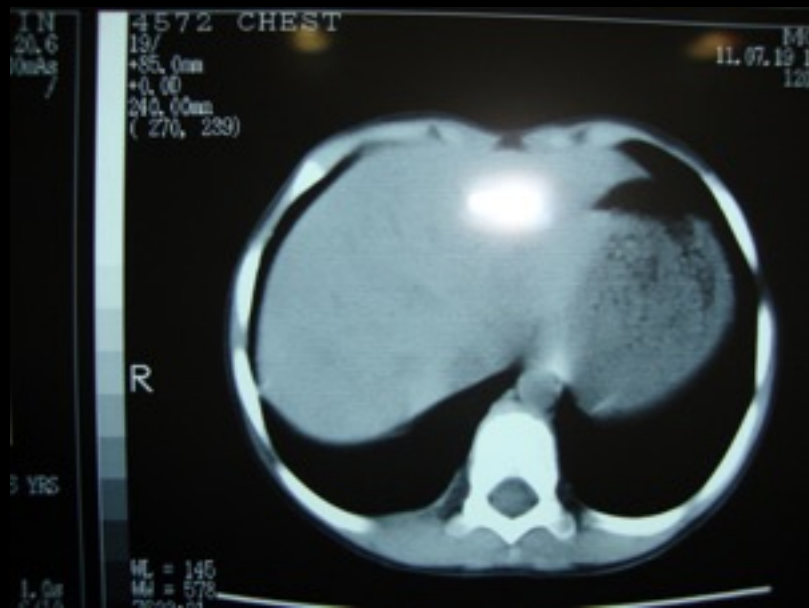


Improved SO function

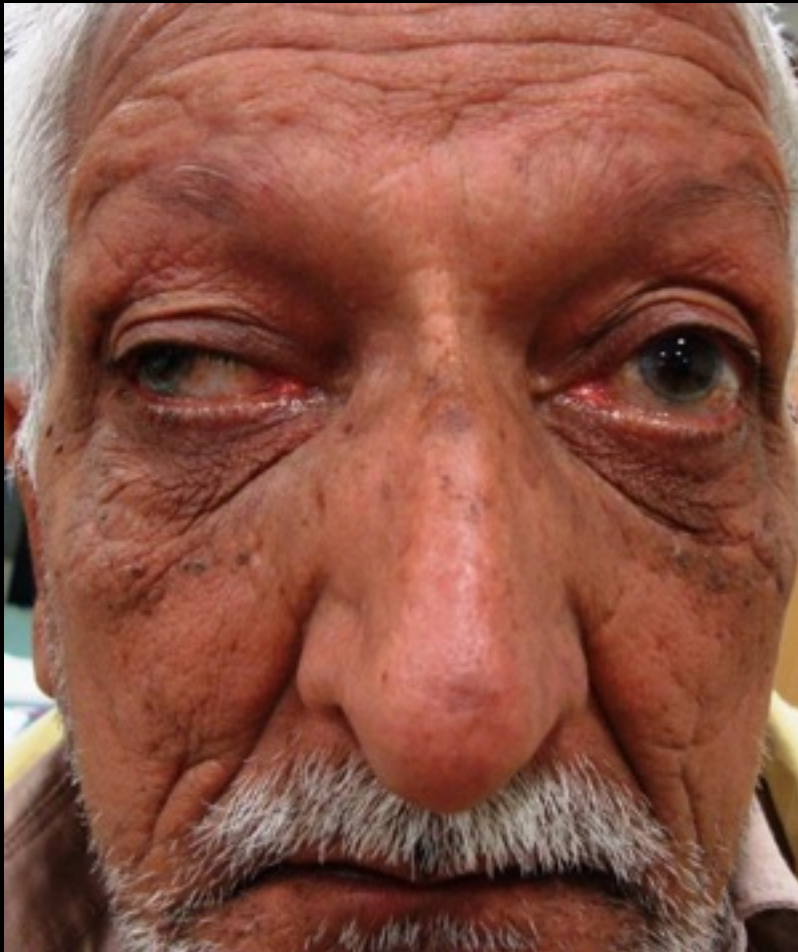
Investigations

- CP/ESR ..Normal
- BSR -98mg/dl, HbA1c ..5.0%
- Serum T3.. 2.3 nmol/L(1.49-2.60)
T4.. 80nmol/L (71.2-141)
- TSH--3.03 U/ml(0.4-4.6)
- Antiacetylcholine receptor antibody assay
(AChR).5.1mmol/L(<0.2) Positive

MRI CHEST

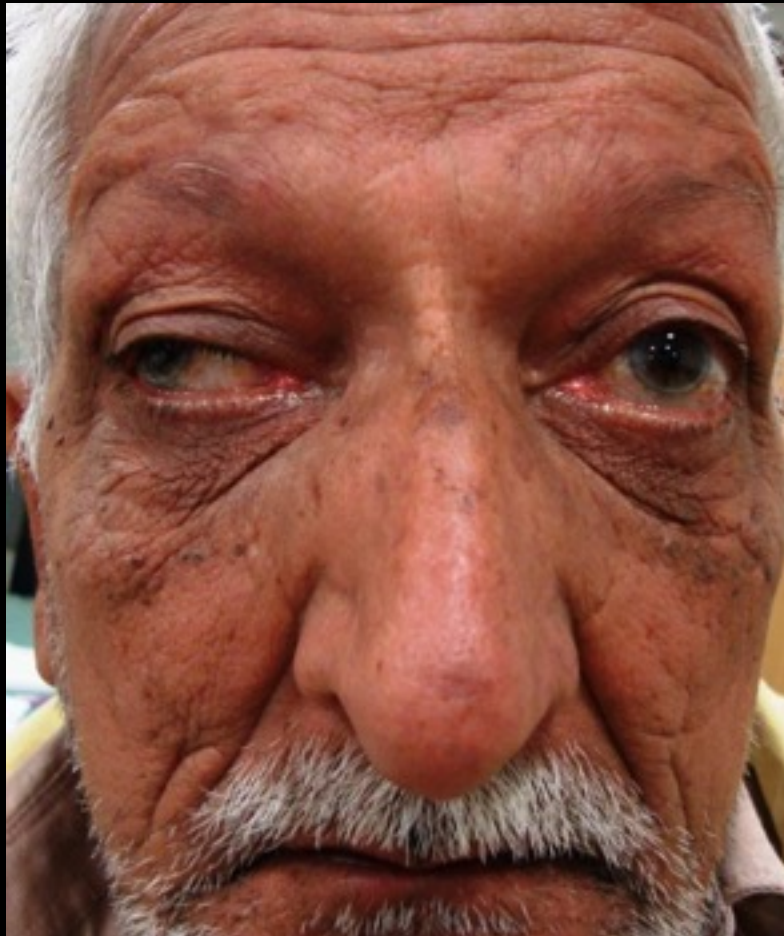


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- 62 y male .
- Drooping of right upper lid increasing gradually and horizontal diplopia..7 /12
- Diurnal variation
- H/o relapses and remissions
- No systemic illness

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Right ptosis and exotropia in primary position

- Frontalis over-action
- Visual acuity --- 6/6 both eyes
- Pupil..Normal reacting/no RAPD
- IOP and fundi--- normal

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Fatigue Test :



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Clinical Diagnosis: III Nerve Palsy

D/D :

- Right pupil sparing 3rd nerve palsy
- Myasthenia Gravis
- Thyroid eye disease
- CPEO

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Prostigmine Test



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INVESTIGATIONS:

BASELINE: normal

Prostigmine test was done:

Positive

CT for Thymoma



Ach receptor antibodies : negative

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Ptosis



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Ptosis & Ophthalmoplegia

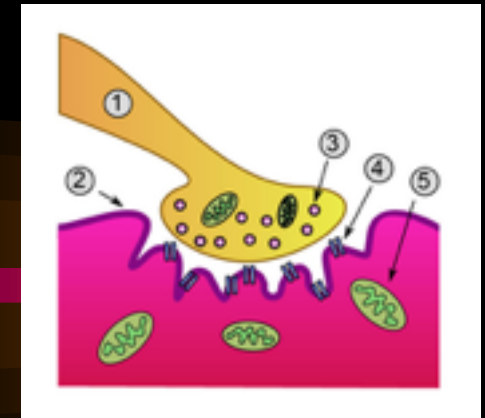


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Management

- Medical therapy : Stepwise:
 - i) Pyridostigmine: 60—mg x 4/day
 - ii) prednisolone: 20mg x alternate day
 - iii) Azathioprine: 50mg x 3 / day
- Surgery: Thymectomy
- Plasmaphoresis
- Regular Follow up

Prognosis



- NMJ disorder; peak in 2nd- 3rd decade, age usually bilateral
- Ocular involvement 90%, 60% presenting features
- Course : 50-70% ocular symptoms progresses to generalized within 2 years-monitoring important.
- Follow-up: 4—6 months
- Keep looking for systemic involvement (dysphagia, dysarthria, breathing difficulty)
- Patient education to report if systemic symptom develop

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