Myasthenia gravis

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Muscle Weakness Curare

- Neuromuscular disorder
- Autoimmune disease, affecting the skeletal muscle especially ocular, facial, bulbar.

Pathophysiology

80%

Acetylcholine binds to the muscle membrane receptor

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Antibody against the receptor binds to it.

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B cells + Complement pathway

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Inflammation

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Muscle cell distruction.

15% of Cases Thymoma → Muscle express receptor tyrosine kinase antibodies

↓ inside

Targets muscle cells

↓

Distruction.

Clinical Features

- Age - 15 to 50 years
- Sex - Female predominance, in younger. and older men.
- Fatigable muscle weakness, movements are initially strong but rapidly weaken as muscle over continues.
- Usually person waker up perfectly and gets worsen in the evening on after exercise
- The First symptom is usually ptosis or diplopia,
- No Sensory loss.

- Difficulty in and weakness in chewing, swallowing, or speaking.
- Depression of eyelids followed by increased reflexed elevation with up gaze (Cogan's lid twitch sign)
- Difficulty in combing the hair due to frequent resting (weakness of shoulder muscle).
- Respiratory muscles may be affected causing respiratory failure.

Investigation:

- Screening for other autoimmune diseases.
- Antibody against acetocholine receptor.
- Antibody of muscle specific receptor tyrosine kinase
- CT Chest / Rule out Thymoma.
- Repetitive Nerve Conduction.
- Tensilon test →

Management

- Goal is to improve the acetylcholine receptor remaining in function.

Lambert-Eaton myasthenic syndrome

- Occurs due to paraneoplastic, with underline malignancy.