

# Pediatrics Neuromuscular Disorders



# Topics to Cover today

- Duchenne Muscular Dystrophy (DMD)
- Myasthenia Gravis (MG)
- Floppy Infant
- Spinal Muscular Atrophy (SMA)
- Guillain-Barre Syndrome (GBS)
- Bell's Palsy



# Duchenne Muscular Dystrophy (DMD)



# DMD-Induction

- It is inherited **X-linked recessive condition**.  
1/3rd are new mutations.
- These patients do not produce **dystrophin**.
- Dystrophin is a protein localized to muscle cell membrane.



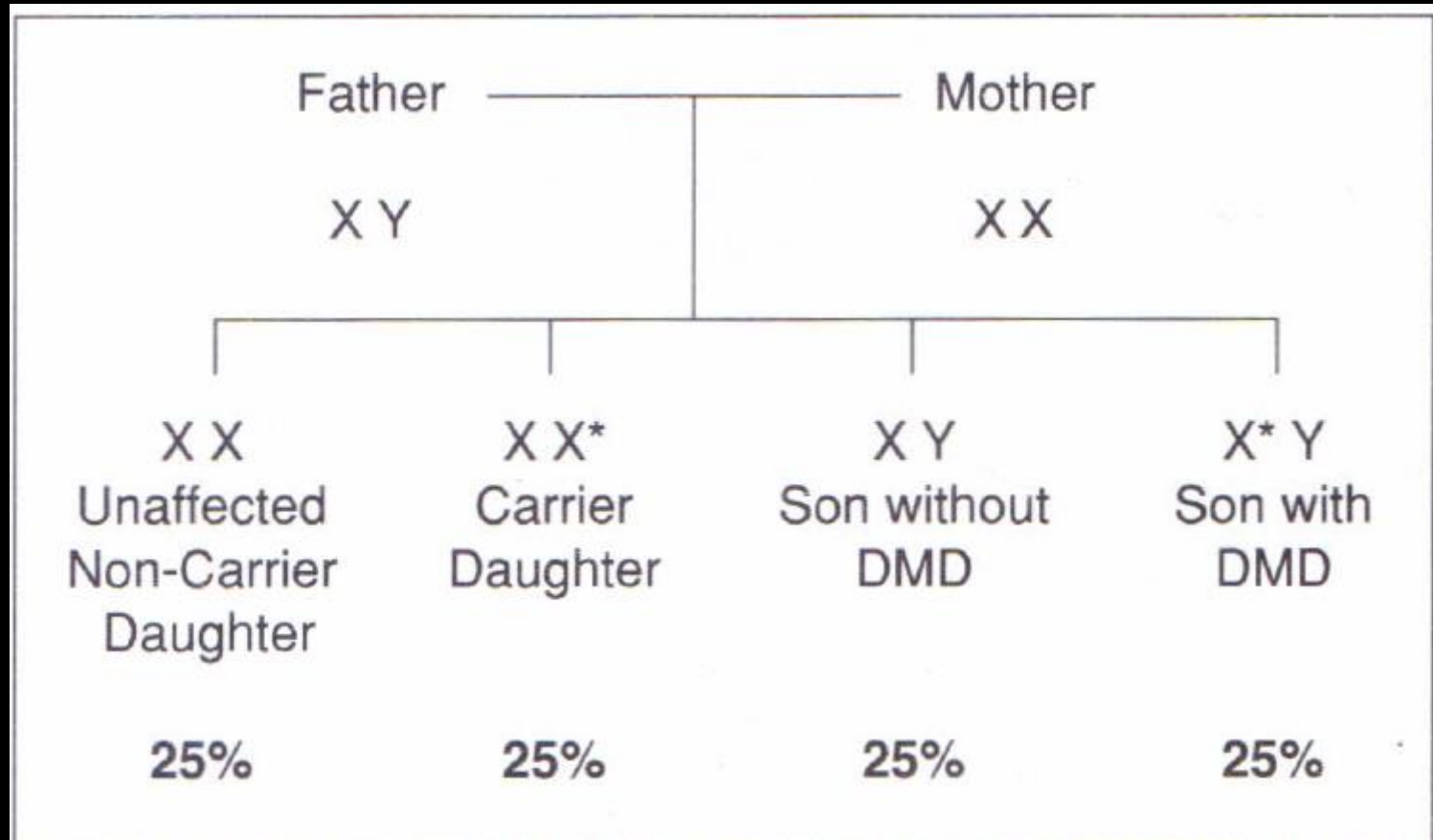
Cont....

- Incidence is 1:3500 male births.
- Female carriers are usually asymptomatic.



# Duchenne Muscular Dystrophy

## Mode of Inheritance



# DMD-Clinical Features

- Onset is in early years. There is delay in motor milestones. Typically, boys lose ability to walk between 8 and 12 years.
- There is difficulty in climbing stairs, and lordosis with waddling gait.



Cont...

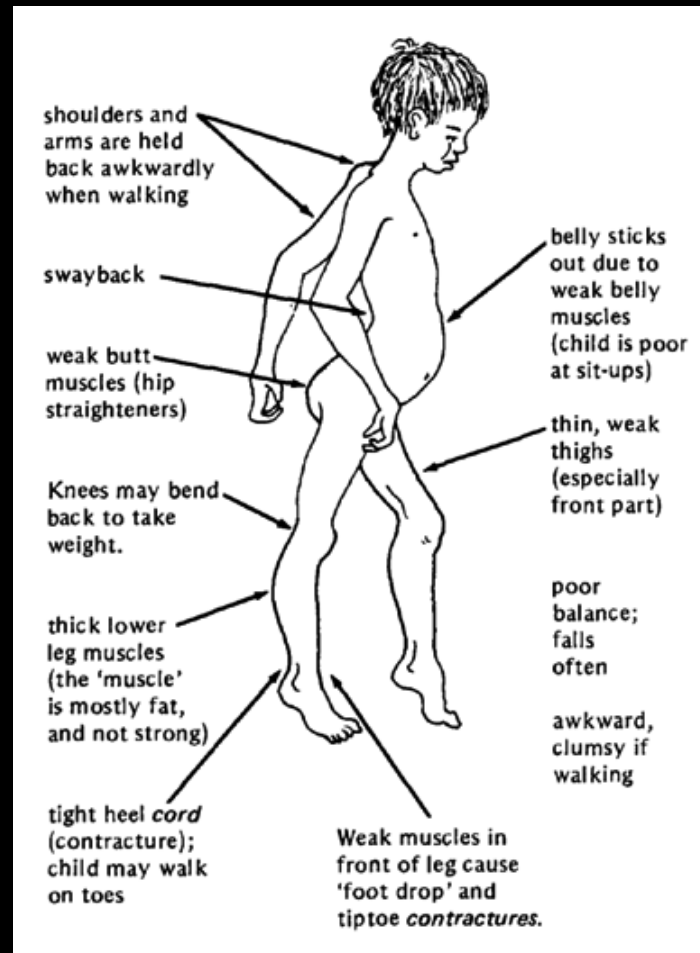
- There is pseudo-hypertrophy of calves and progressive muscular weakness.
- Respiratory failure occurs.





# Duchenne Muscular Dystrophy

## Clinical Features



# Duchenne Muscular Dystrophy Pseudo-Hypertrophy



# Duchenne Muscular Dystrophy

## Diagnosis:

- High plasma creatine kinase ( $> 5000$ iu/L).
- Muscle biopsy shows absent dystrophin.
- Positive Gower's sign



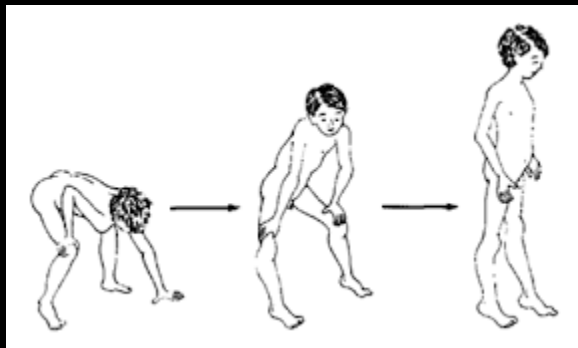
# Duchenne Muscular Dystrophy

## Gower's sign

Gower's sign in muscular dystrophy



Inherited as x-linked recessive.



## Treatment:

- There is no curative treatment for Duchenne muscular dystrophy.
- Physiotherapy and appropriate seating is needed.
- Steroids have some transient role.

