Muscular Dystrophies: Duchenne Vs Becker

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What is Muscular Dystrophy?

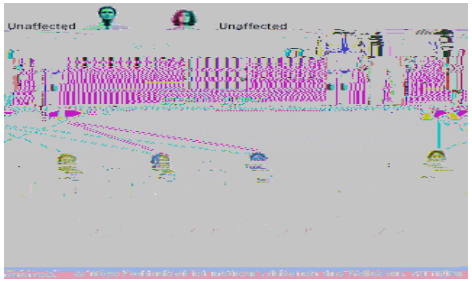
Muscular Dystrophy (MD) is a group of inherited diseases in which the muscles that control movement (called voluntary muscles) progressively weaken.

What Are the Causes of MD?

- Muscular dystrophy is caused by defects in certain genes, with type determined by the abnormal gene.
- In 1986, researchers discovered the gene that, when defective or flawed, causes Duchenne muscular dystrophy (DMD). In 1987, the muscle protein associated with this gene was named dystrophin. Duchenne muscular dystrophy occurs when that gene fails to make dystrophin.
- Becker muscular dystrophy (BMD) occurs when a different mutation in the same gene results in some dystrophin, but it's either not enough or it's poor in quality.

Duchenne MD Vs. Becker MD

How are BMD and DMD inherited?



- Men carry one X chromosome and one Y chromosome. Females carry two Y chromosomes. Thus, in order for a girl to become affected by muscular dystrophy, both of her X chromosomes would have to carry a defective gene, which is an extremely rare occurrence, since her mother would have to be a carrier (one defective X chromosome) and her father would have to have muscular dystrophy (since men carry just one X chromosome)
- A few muscular dystrophies aren't inherited at all and occur because of a new gene abnormality or mutation

Treatments

- **Can't be cured, but treatment may help**
- Medications, therapy, breathing aids, or surgery may help maintain function, but life span is often shortened.