

# Muscular Dystrophy

Duchenne Muscular Dystrophy is a genetic disorder that leads to worsening neurologic dysfunction. It occurs in 2-3 of every 10,000 children.

It affects young males only and onset occurs between 2-6 years of age.

It is characterized by increasing loss of function caused by progressive replacement of muscle tissue with fibrous and fatty tissue. In addition, skeletal and cardiac muscles lose elasticity and strength.

Becker's Muscular Dystrophy is similar to Duchenne's in that it is sex-linked recessive. It is characterized by a large calf muscle (which looks like a Popeye muscle). In addition, blood levels of Creatine phosphokinase (CPK ) are elevated.

Its onset occurs later in childhood and has a slower progression with a longer life expectancy (average diagnosis occurs at age 8 compared to 2 years of age with Duchenne's).

## CAUSES AND RISK FACTORS

Risk factors for muscular dystrophy are genetic.

## SYMPTOMS AND TYPES

There are orthopedic manifestations of muscular dystrophy:

- large calf muscle (looks like Popeye muscle)
- scoliosis (curvature of the spine)
- turned in foot
- joint contractures (reduced joint movement)

Other symptoms include:

- progressive weakness affecting proximal muscles first (begins with gluteal muscle weakness)
- gait abnormalities
  - delayed walking
  - toe walking
  - clumsy, waddling gait
  - difficulty climbing stairs, hopping, or jumping

## DIAGNOSIS AND TESTS

Diagnostic tests may include labs, muscle biopsy and DNA testing.

## TREATMENT AND CARE

Rehabilitation can include:

- physical therapy for range of motion exercises
- adaptive equipment
- power wheelchairs
- bracing

Surgery may also be recommended, and can include:

- soft tissue releases to prolong ambulation
- foot surgery to allow shoe wear
- scoliosis surgery
- tendon release surgery
- spinal fusion

Postoperative care focuses on early mobilization and ambulation to prevent deconditioning.

## LIVING AND MANAGING

Multidisciplinary care can address many of the issues patients will face.



**Need an appointment or have questions?  
Call 832-822- 3100 for the Main Campus Clinic and  
Health Centers.  
For our West Campus location, call 832-227-7678.**