



Empowering Children. Supporting Families. Building Brighter Futures.

Resource 029 | Movement and muscle conditions

Muscular dystrophies

What it means

Muscular dystrophies are a group of inherited conditions causing muscle weakness and muscle damage over time. Different forms have different causes, patterns, and ages of onset. An overview label should not replace identifying the specific type, because treatment and monitoring depend on that diagnosis. [1]

Causes and risk factors

Changes in genes important to muscle structure or function cause muscular dystrophies. Inheritance may be X-linked, recessive, dominant, or related to a new genetic change. Duchenne is one form, but not every dystrophy involves dystrophin. Family history can be absent. [1,2]

General family education. A concern deserves assessment, but this guide does not diagnose a child or prescribe treatment.



Signs and everyday impact

Children may have delayed movement skills, frequent falls, difficulty climbing or rising, unusual fatigue, or progressive loss of strength. Some forms affect facial muscles, breathing, swallowing, or the heart. Learning needs may occur in some types. Symptoms vary widely and should not be predicted from the umbrella label. [1,2]

Assessment and diagnosis

A neuromuscular specialist reviews the weakness pattern, development, family history, examination, and blood tests such as creatine kinase when indicated. Genetic testing helps establish the type. Additional investigations and heart or breathing assessments depend on the suspected condition. Muscle biopsy is needed only in selected situations. [1,2]

Treatment and therapy

Care combines type-specific medical treatment, rehabilitation, appropriate activity, equipment, nutritional and respiratory support, and heart surveillance when relevant. Some diagnoses have disease-modifying options; eligibility and risks must be reviewed by specialists. Therapy should maintain comfort and function without overloading damaged muscles. There is no single treatment plan for all dystrophies. [1,2,3]

Support at home

Use the recommended activity and rest balance, report pain or unusual fatigue, and avoid unprescribed intensive strengthening. Ask about falls prevention and accessible play. Follow vaccination, illness, and anesthesia advice from the neuromuscular team where applicable.

When to seek help

Breathing difficulty, chest symptoms, dark urine after exertion, severe muscle pain, or abrupt loss of function needs urgent medical assessment.

Questions for your care team

- Which type has been identified and how certain is the diagnosis?
- What heart, breathing, or swallowing monitoring is needed?
- Which activities are useful and which should be avoided?



Podcast preparation

Use this outline to develop a later podcast script.

Suggested opening

Welcome to Mariel Early Intervention. Today we discuss muscular dystrophies. Muscular dystrophies are a group of inherited conditions causing muscle weakness and muscle damage over time. This is general education; each child needs individualized care.

Opening: Define the topic and its developmental context.

Understanding: Explain causes and signs without inviting self-diagnosis.

Assessment: Describe evaluation and distinguish screening from diagnosis.

Support: Discuss treatment, therapy, and practical family supports.

Closing: Explain urgent signs and one clear next step.

Misconception to address: All muscular dystrophies do not follow the same course or have the same treatment options.

Before recording: update clinical references and local service details, arrange clinical review, and use fully consented or fictional examples.

Terms in plain language

- Creatine kinase: an enzyme that may rise with muscle damage.
- Neuromuscular: involving nerves and muscles.
- Dystrophin: a muscle protein affected in Duchenne and Becker dystrophy.

Sources and further reading

Sources accessed 3 October 2026. Numbered references support the clinical overview. Treatment availability and referral routes vary by country.

[1] Muscular Dystrophy

<https://www.ninds.nih.gov/health-information/disorders/muscular-dystrophy>

[2] Muscular dystrophy: MedlinePlus Medical Encyclopedia

<https://www.medlineplus.gov/ency/article/001190.htm>

[3] Duchenne and Becker muscular dystrophy: MedlinePlus Genetics

<https://medlineplus.gov/genetics/condition/duchenne-and-becker-muscular-dystrophy/>