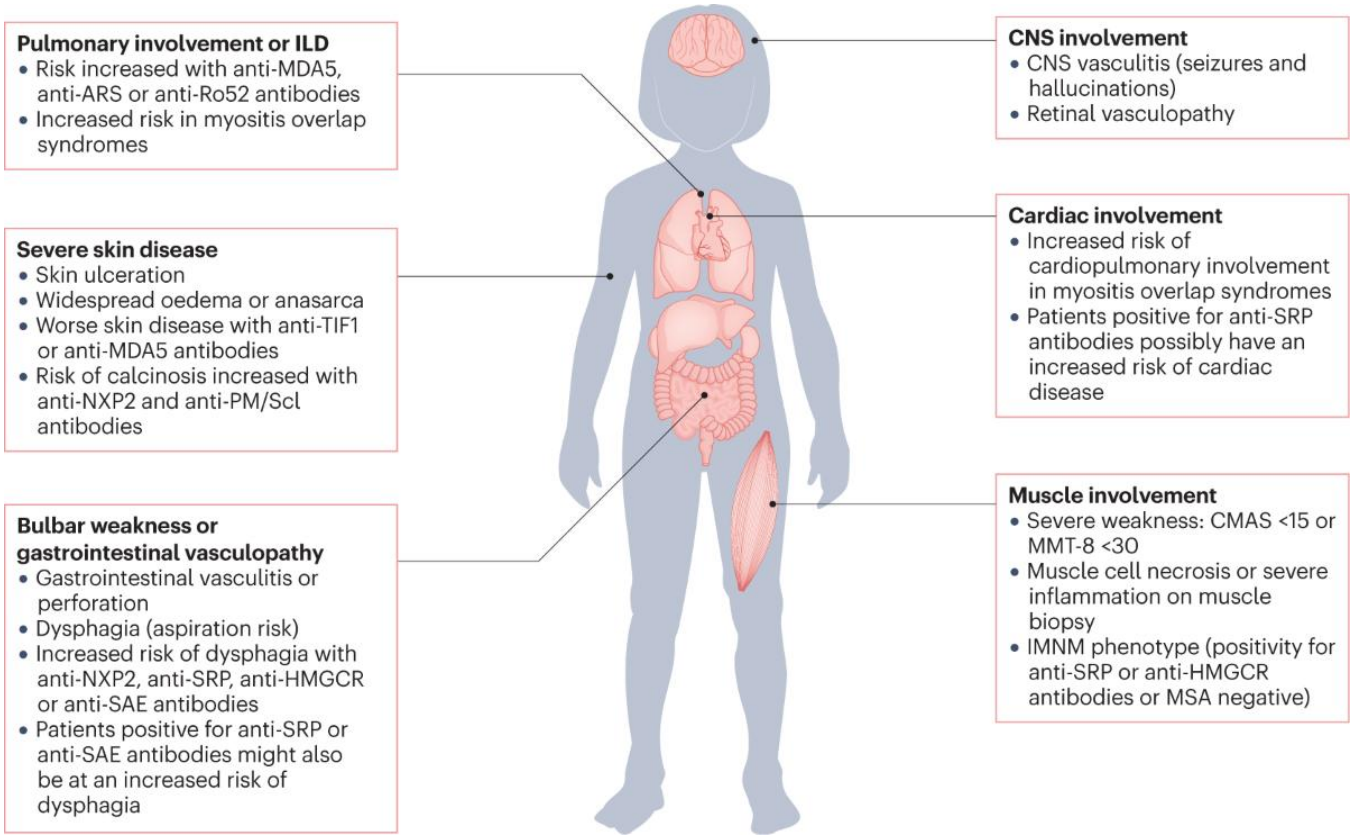
Juvenile Dermatomyositis (JDM)



What is Juvenile Dermatomyositis?

Juvenile Dermatomyositis (JDM) is a **rare autoimmune condition** that causes **inflammation of the muscles and skin** in children.
It affects the immune system, which mistakenly attacks healthy muscle and skin tissue, leading to muscle weakness and distinctive rashes.

Who is affected?

- Most commonly affects **children aged 4–14 years**
- More common in girls than boys
- Not infectious or caused by injury

Common Symptoms

1. Muscle symptoms

- **Weakness in the upper arms, thighs, hips, and shoulders**
- Difficulty climbing stairs, getting up from the floor, or lifting arms
- Fatigue
- Trouble running or keeping up with peers

2. Skin symptoms

- **Heliotrope rash** (purple/red rash around the eyelids)
- **Gottron's papules** (pink/purple bumps on knuckles)
- Rash on neck, shoulders, chest ("shawl sign"), or upper back
- Sun sensitivity (rashes worsen after sunlight exposure)

3. Other possible symptoms

- Joint pain or swelling
- Nail fold redness
- Trouble swallowing (rare)
- Tummy pain
- Weight loss
- Low energy

What causes JDM?

The exact cause is unknown, but it is thought to involve:

- Genetics
- Immune system overactivity
- Environmental triggers (e.g., infections, sun exposure)

It is **not** caused by diet, exercise, or anything the child has done.

Diagnosis

Diagnosis is made by a paediatric rheumatologist and may include:

- Blood tests (muscle enzymes, inflammatory markers, autoantibodies)
- MRI to look for muscle inflammation
- Muscle strength assessment
- Skin or muscle biopsy (sometimes)

Early diagnosis and treatment are important to prevent complications.

Treatment

Treatment focuses on reducing inflammation, improving strength, and preventing flare-ups.

1. Steroids

- Usually started immediately to control inflammation
- Given orally or via IV depending on severity

2. Immunosuppressive medicines

- Methotrexate is commonly used
- Others may include azathioprine, mycophenolate, IVIG, or biologics (e.g., rituximab)

3. Physiotherapy

- Helps restore muscle strength and maintain flexibility
- Essential part of treatment

4. Sun protection

Because rashes and skin flares worsen with UV exposure:

- Use high-factor sunscreen (SPF 30–50)
- Wear hats and protective clothing
- Avoid strong midday sun

5. Nutrition

Some children may benefit from a diet rich in:

- Protein (muscle repair)
- Calcium/vitamin D (especially if on steroids)

Living with JDM

- Most children respond well to treatment
- Improvement often occurs over months
- Some children may have flare-ups requiring adjustments to treatment
- Ongoing follow-up with paediatric rheumatology is essential

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Possible Complications (if untreated)

- Persistent muscle weakness
- Calcinosis (calcium lumps under skin)
- Joint tightness or contractures
- Difficulty swallowing
- Lung involvement (rare)
- Reduced quality of life

Early treatment greatly reduces these risks.

Prognosis

- With modern treatment, prognosis is generally **very good**
- Many children achieve **full remission**

- Long-term monitoring helps prevent relapses and complications

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When to Seek Medical Help

Contact your child's healthcare team if you notice:

- Worsening weakness
- New rash or skin changes
- Difficulty breathing or swallowing
- Fever or illness during treatment
- Side effects from medicines

Support & Resources

- National Rheumatoid Arthritis Society (NRAS)
- Myositis UK
- Local children's physiotherapy and OT services
- School support for physical difficulties