Leg fractures/trauma

If ambulant before fracture, internal fixation is preferable to casting as it helps to preserve muscle and speed a return to walking. Mobilise and contact local team for orthotics input.

If breathing rapidly and/or there is neurological deterioration (e.g. confusion) after a fracture or body trauma, investigate possible fat embolism syndrome.

Anaesthetic precautions

- Use of intravenous general anaesthetics is generally safe.
- Inhaled anaesthetics should be avoided.
- Neuromuscular blocking drugs should be avoided.
- Local anaesthetics and nitrous oxide are safe, e.g. for minor dental procedures.

Recommendations and precautions

- Immunisations should be kept up-to-date. Do not use live vaccines if taking corticosteroids.
- Wear seat belt when using wheelchair to avoid dangerous falls.

Muscular Dystrophy UK
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Registered Charity No. 205395 and Registered Scottish Charity No. SC039445

While every reasonable effort is made to ensure this document is useful to clinicians and service users, Muscular Dystrophy UK shall not be liable whatsoever for any damages incurred as a result of its use.

If presenting at an emergency department, contact the neurology/neuromuscular team and respiratory team at:

________________________________________________________________
as soon as possible on:

Contact us today to receive a vital neuromuscular care plan:
Email info@musculardystrophyuk.org or call our Freephone helpline 0800 652 6352

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Respiratory

- Chronic respiratory failure may present without the usual signs of respiratory distress. Subtle signs include early morning headaches, fatigue, daytime sleepiness, reduced appetite and weight loss. Consider underlying respiratory failure in case of a chest infection, and monitor carbon dioxide.
- If supplemental oxygen is required during a respiratory crisis, this must be carefully controlled. Healthcare professionals must be alert to the possibility of acute respiratory failure with an arterial blood gas assessment of oxygen, carbon dioxide and bicarbonate concentration. Non-invasive ventilation, with oxygen entrained, may be required.
- Assisted coughing with chest physiotherapy, and breath-stacking techniques with an AMBU bag help to clear lower airways secretions. This can also be facilitated by a cough assist device.

Cardiac

- Patients with an undiagnosed muscle-wasting condition could develop a cardiomyopathy. Symptoms of cardiac failure are subtle, especially during the early stages, and all patients require a regular echocardiogram.
- Most patients will receive ACE-inhibitor and beta-blocker therapy.
- If patient has not been having regular heart checks, consider the possibility of a severe underlying cardiomyopathy.
- Cardiac arrhythmias must be considered for patients with palpitations and/or dizziness and an ECG and 24-hour tape are required.

NOTE: Liver enzymes (AST/ALT) may be high on blood tests: this is normal in muscle-wasting conditions where the CK level is high, and should not prompt liver investigations unless otherwise indicated.

Undiagnosed muscle-wasting conditions

This is a very varied group of muscle conditions that may cause a spectrum of mild to severe muscle weakness with minimal to significant disability. They may present in the very young child or later in adulthood and progression can be very variable. There may be a family history or this may be the first case in the family that has been recognised.

Some patients may need to use walking aids, have difficulties climbing stairs, lose the ability to walk, or require wheelchairs. Others may have more difficulties with upper limbs, distal problems with hands and feet, stiffness or truncal weakness. They may have contractures and pain that limits mobility. Creatine kinase (CK) levels can be normal to significantly elevated.

As a group of conditions, they may differ in terms of disease onset, progression, disease severity and involvement of other systems. Prognosis and management is therefore not uniform. Monitoring and early identification of complications and risk factors is crucial, such as respiratory and cardiac complications; all patients should be screened.

NOTE: Liver enzymes (AST/ALT) may be high on blood tests: this is normal in muscle-wasting conditions where the CK level is high, and should not prompt liver investigations unless otherwise indicated.