# Fracture – Leg Fracture Treatment:
If child was able to walk well before his leg fracture, internal fixation is recommended rather than casting or external fixation. Surgery should help preserve muscle and allow the child to walk sooner than casting. If child is breathing rapidly and/or if he has neurologic deterioration (like confusion) after a fracture or body trauma, fat embolism syndrome should be considered. Fractures are common in Duchenne and Becker muscular dystrophy due to frequent falls and steroid use.

## Anaesthetic Precautions:
All general anaesthetics should be given by intravenous route (IV) only. Do not use inhaled anaesthetics on a person with Duchenne. This includes paramedic initiated Methoxyflurane (green whistle) commonly used in first line first aid and ambulance transfer. Local anaesthetics and Nitrous Oxide are safe for minor procedures such as dental or preoperatively.

## Cardiac:
Cardiomyopathy is almost universal in both Duchenne and Becker muscular dystrophy because the heart is a muscle. Older children and young teens may have commenced taking heart medications beginning with an ace-inhibitor. By late adolescence, it is highly likely that a Beta Blocker will have been added to the youth’s medication regime and that these drugs will have an effect upon blood pressure. Ongoing cardiac surveillance is imperative for any child, young person with Duchenne or Becker.

## Treatment and Transfers:
Physiotherapy is crucial in retaining range of motion and minimizing contractures. Daily passive stretches are available online and on DVD for patients of all ages. Compliance with wearing night splints and gentle exercise such as swimming are both recommended. Prior to loss of ambulation, the use of assistive mobility devices such as scooters and wheelchairs are recommended over long distances to avert fatigue and excessive muscle degeneration. When a spinal fusion has been performed consider position, safety and comfort in performing a transfer.

## Oxygen and Ophthalmology:
**Risk: Respiratory Failure: DO NOT GIVE OXYGEN** without checking end-tidal or blood CO₂ level. A low haemoglobin saturation may indicate CO₂ retention and a need for positive pressure ventilation. IF supplemental oxygen is given, please monitor CO₂. Non-invasive ventilation may be required. Steroid use can cause problems with vision and there are reported cases of glaucoma and Idiopathic intracranial hypertension in children and young men with Duchenne.

## Records and Respiratory Care:
Records - Your child's most recent respiratory function test results should be updated on his eHealth record. Remind your doctor to keep all results updated. This information is extremely important when presenting to an emergency department anywhere across Australia or internationally.

Respiratory - Assisted coughing helps to clear sputum and mucous plugs. Use cough assist machine if available. If a cough assist is not available, AMBU bag may be used to induce the same effect or at any time to provide breaths. Consult a physiotherapist where possible. Seek medical attention early for chest infections or any signs of illness. Ongoing respiratory surveillance is imperative alongside cardiac care.
Steroids and sleep studies:

If a child has been vomiting and/or unable to take corticosteroids for 24 hours:

He needs a substitute corticosteroid by IV until he can take his medication orally again. The following conversion is recommended: 6mg of deflazacort equals 5mg of prednisone.

It is normal for AST/ALT (LIVER ENZYMES) to be high in a child with Duchenne when on steroids.

Do not use live vaccines on a child taking corticosteroids due to immunosuppression in long-term steroid use. The most recent sleep study results will be uploaded to the eHealth record.