

Investigate Skeletal Muscle Disease

Indications for a muscle biopsy:

- Progressive muscular atrophy and weakness;
- Localized or diffuse inflammatory muscle disease;
- Trauma to nerve or blood supply to a muscle group;
- Metabolic disease, eg. storage diseases;
- Neoplasia.

Collection and handling of the biopsy:

- Ideally, choose a muscle with moderate clinical involvement, as very weak or atrophic muscles show end-stage changes, making histological interpretation difficult.
- Avoid pressure points, sites of previous trauma, surgery or biopsy.
- The biopsy should be done at the equator of the muscle to avoid sites of tendinous insertion.
- The tissue to be sampled should not be infiltrated with local anaesthetic and should be handled with as little surgical trauma as possible.
- Ideally multiple samples should be collected.
- Collect reasonably sized samples! A band of muscle fibres should be dissected away from the muscle belly and then transected at either end.
- Once the biopsy has been obtained it should be placed on a piece of cardboard the same length as the biopsy – **DO NOT STRETCH THE BIOPSY** – and pinned or stapled at both ends to prevent contraction.
- The biopsy, attached to the cardboard can then be fixed in 10% formalin (as we routinely supply in our sample pots).
- Ideally the sample in formalin should be left to stand for half an hour before it is packaged for posting off.

