

## Muscle, Skin and Neurotransmitters

The laboratory requires prior knowledge of planned lumbar punctures for neurotransmitters and muscle biopsies for respiratory chain enzymes, so that we can arrange for a member of laboratory staff to attend with liquid nitrogen. The time spent out of the laboratory can be very variable hence we have to ensure that we have the staff to cover their absence and also check the availability of the liquid nitrogen. It is also advisable to plan to perform these procedures earlier rather than later in the day as the routine laboratory hours are until 5 pm and time needs to be allowed for us to process the specimens on our return to the laboratory.

### **CSF neurotransmitters:**

We provide the collection tubes, the request form and the liquid nitrogen. Please contact Clinical Chemistry, metabolic section ext 17445 to provide us with the patient details, the date and venue of the lumbar puncture, the estimated time and the bleep number of the medic who will be carrying out the procedure. We will then ask you to ring us on the day to confirm that you have the patient and are about to start the procedure.

The samples collected go into the provided three tubes. The first two each require 0.5 ml CSF, the third tube requires 1 ml CSF. These are immediately dropped into the liquid nitrogen.

### **Muscle biopsies for Respiratory Chain Enzymes:**

We require as much advance warning as you have! We liaise with Histopathology as their samples are collected at the same time. Please contact Clinical Chemistry, metabolic section ext 17445 to provide us with the patient details, the date and venue of the muscle biopsy, the estimated time and the bleep number of the medic who will be carrying out the procedure.

Three pea sized pieces of muscles need to be taken.

Piece 1 is placed on the petri dish provided - for histopathology to orientate, the other 2 pieces need to be individually wrapped in the provided foil and placed immediately into the liquid nitrogen.

We also advise that a skin biopsy is taken at the same time. We provide the skin biopsy pot and the special consent form that is required for skin biopsies. *Only the 2 pieces of muscle wrapped in foil are placed in the liquid nitrogen.*

We can leave the liquid nitrogen etc at the hub in theatres if the muscle biopsy is to be done in theatres, however procedures carried out on the wards/daycare/MRI will always need a member of laboratory staff to stay with the liquid nitrogen. This has been decided after a risk assessment of the storage and use of our liquid nitrogen.

In exceptional circumstances muscle biopsy for respiratory chain enzymes or CSF neurotransmitters can be requested out of hours. This will always need to be a consultant to consultant clinical scientist request and time should be allowed for the consultant clinical scientist to contact a biomedical scientist to be able to attend with the liquid nitrogen.

If you need any other information please do not hesitate to contact:

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