



Diagnostic  
Pathology  
Medical  
Group, Inc.

## SKELETAL MUSCLE BIOPSY SPECIMEN COLLECTION AND HANDLING INSTRUCTIONS

Enzyme histochemistry is the primary method used in the diagnosis of muscle diseases. Since enzymes are fixative and heat sensitive, these biopsies can not be handled in a routine manner.

A muscle biopsy must be carefully coordinated between your office and our lab to assure rapid transport of the specimen. We must also make sure to have trained personnel on hand to properly apportion and flash freeze the specimen immediately upon receipt.

- Call the DPMG Customer Service Department at 916-446-0424 at least 24 hours prior to the procedure.
- **Fresh** tissue is necessary for the diagnosis of skeletal muscle diseases.
- Physician: Remove the tissue along the longitudinal axis of a muscle bundle. A section about 1.0 – 3.0 cm in length is optimal. Less is needed from infants or children.
- **Do not** stretch or pin the tissue after removal from the patient. Let it relax at room temperature for a few minutes.
- Wrap the specimen in a saline-moistened gauze sponge. The tissue should not be allowed to dry out, but **do not** soak or float the tissue in saline. This can impair the flash freezing process, causing ice crystal artifact which seriously impairs diagnosis.
- Seal the specimen in a fluid tight plastic bag.
- Place the bag in a dry plastic container.
- Surround the container with ice chips. **Do not** let the biopsy come into contact with the ice and **never** use dry ice. It is important, especially in the summer months, that the tissue be kept cool. Enzymes are affected by even a moderate amount of heat.
- Review and follow the instructions for labeling the containers and completing the requisition as detailed in **Biopsies to be Submitted in Fixative: General Instructions**.
- **Always** include a **History and Physical** with the biopsy. An accurate and complete diagnosis can not be made without this report. We will call your office for this document if not received.
- Make sure that the paperwork is kept separate from the specimen, ice and saline.