To: Surgeon obtaining neuromuscular biopsy specimens.
VIA FACSIMILE OR INTERNET

Subject: Size and quality of specimens sent to our lab for neuromuscular pathology analysis.

Specimen size is very important for the study of neuromuscular disorders. Inadequate specimens limit the quality of results obtained in the study of biopsies and may necessitate repeat procedures.

Nerves should be submitted intact and approximately 5 cm. in length to allow for adequate fiber teasing, frozen longitudinal and cross-sections. All of these tests are necessary for a complete Nerve study. The specimen should be visually inspected for the presence of white glistening fascicles in bundles. The specimen should include epineurium, perineurium, and endoneurium.

Muscle biopsies should contain at least three 1.5 cm x 1.0 cm x 1.0 cm specimens to provide a representative sample and enough tissue for quantitative studies if necessary. Single samples should be avoided if possible. Specimens removed from the Quadriceps or Biceps yield superior results and Gastrocnemius muscle should be avoided. Cautery destroys enzymes in muscle specimens, therefore surgical specimens should not be obtained using laser or electrocautery devices. Specimens should not be exposed to saline due to ice crystal formation during freezing. Never place specimens in formalin, resubmit fresh tissue before sending the specimen to Baylor Neurology.

Respectfully yours,

F. Kevin Blankenship
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