

Surgeon's Guidelines Preparing Muscle to be Transported for Studies

Equipment Needed:

Saline
4x4 gauze
Biohazard transport bag
Ice (Do not use dry ice)

Tissue Sampling:

If using local anesthesia, do not infiltrate the muscle itself. Obtain affected tissue, with minimal fatty or fibrous connective tissue (+4 on MRC scale, -1 to -2 rating on Mayo muscle manual). Triceps, biceps or vastus lateralis are typically chosen. Avoid muscle that has recently undergone EMG or injection. Do NOT use muscle clamps or electrocautery in the procedure!

Muscle Histochemistry Patient Information Sheet must be fully completed and sent with the muscle biopsy.

Note: Specimens can only be delivered to Mayo Monday-Wednesday.

Procedure:

1. Schedule surgery for the morning, if at all possible. The day before surgery arrange a delivery time, by contacting Iowa Pathology Associates. **Path Lab couriers are unable to deliver muscle biopsies, therefore each facility needs to make arrangements for delivery to Iowa Pathology Associates. Specimen needs to be delivered to Iowa Pathology no later than 12 pm. This allows the lab preparation time before the Mayo courier arrives.**
2. Obtain tissue specimen from site described above. Size should be approximately 2 cm by 0.5 cm. If extra studies are needed, then another piece or two of similarly sized specimens should be obtained.
3. Wrap the specimen in lightly dampened gauze with saline (not too wet, never submerged). **Do not FREEZE!**
4. Label a biohazard bag with the patient's name.
5. Place the gauze wrapped specimen in the bag. Squeeze out excess air from the bag and zip shut.
6. **Pack the bagged specimen on moist ice (DO NOT USE DRY ICE).**
7. Refrigerate tissue in moist ice until delivery. Room temperature or warmer will destroy the tissue for special studies.
8. Fill out a green histology request form, specifying fresh muscle tissue for studies. Indicate on the request form if extra studies are needed (e.g. electron microscopy). Also, include the completed Muscle Histochemistry Patient Information Sheet.
9. Place the papers in a biohazard bag to send along with the specimen.
10. **Contact Iowa Pathology Associates on the day of surgery to confirm delivery time.**

Reference: Mayo instruction sheet "Directions for Preparing Muscle Specimens for Histochemical Study at Mayo"
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