**Purpose**

To establish a standardized procedure among rotating staff for ciliary biopsies performed at Mott Children’s Hospital.

**Materials**

* 1 Biohazard specimen bag
* 2 vials of Glutaraldehyde (ordered from EM lab and picked up from Room 2)
* 1 pipet
* 1 slide
* 1 tube of RPMI
* 1 empty tube
* 1 Pediatric Requisition with *Cilmot* sticker attached to lower right corner

Kits should be premade and placed in the ciliary biopsy bin in the Mott frozen lab refrigerator.

**Procedure**

Preparing for the Ciliary biopsy

Surgeons will contact the Pediatric Administrator to schedule a ciliary biopsy. The OR will call 15 minutes prior to the ciliary biopsy to notify the lab when they will be ready. Notify the Attending that you are about to retrieve the Ciliary biopsy. The lab tech will then grab a premade kit and prepare a station for the ciliary biopsy.

On a C-fold paper towel, remove the pipet, the RPMI, and the slide (placed face up). All other materials remain in the biohazard bag. Dress in a bunny suit, shoe protectors, and a hair net. (A mask may or may not be necessary depending on the case. If so, masks can be found in front of all OR’s.) Take the biohazard specimen bag with the remaining contents and a pen back into the OR.

Retrieving the Ciliary biopsy

Once in the OR, announce you are from Pathology for the Ciliary biopsy and confirm it is the correct patient. Collect 3 patient stickers: 1 for the requisition, 1 you will label “L” or “Left”, and one you will label “R” or “Right”. Place the patient labels with “L” or “R” each on its own Glutaraldehyde vial. Fill out the requisition as such:

* Place the patient label in the top right corner
* Fill in the correct date of the surgery, collection date and time, check the *Routine* box in the top left corner
* *Specimen and location* should be written as L or R.
* *Clincal Diagnosis/Operative Procedure* mark *Other* box and write in “Ciliary biopsy”
* *Processing Instructions* check the *Routine* box

Take both Glutaraldehyde vials and the empty tube to the surgeon when you are ready. The surgeon or fellow will then proceed to do the brushings. You will have the appropriate vial opened (R versus L) and ready for each brush as they are handed to you. A nurse will cut the brush to the appropriate length to close each vial of Glutaraldehyde. The final brushing is placed in the empty tube for the motility study and does not need to be trimmed. Vigorously shake the Glutaraldehyde tubes for 30sec to 1 minute. Return to the lab with the Glutaraldehyde vials back in the biohazard specimen bag with the requisition and carry the fresh brush in the empty tube. Place the Gluteraldehyde samples/tubes back in the bag and put in the refrigerator until ready to accession. Notify the Attending that you have returned with the ciliary biopsy.

Preparing the slide

Place 1-2 small drops of RMPI on the slide and twirl the fresh brush (motility sample) in the RMPI on the slide while applying a small amount of force pressing down. Place the slide on the microscope stage and observe motility with the attending.

The attending should call the surgeon with results, fill out the Cilmot diagnosis on the requisition, surgeon’s name and date informed, then sign and date.

Accessioning

Specimen 1 and 2 (“Left” and “Right”) should be accessioned as **CILMOTEM**. The final specimen (“Left”) used for the onsite assessment should be accessioned as **CILMOT** (this will have a sticker printed, but disregard it). Apply the labels to the appropriate vials and the requisition.

Grossing

Accessioning number

Patient name

State “Please insert cilia motility template.”

Read the requisition for specimen and location

State “Please dictate clinical history to rule out immotile cilia.”

“Received are \_\_ parts:

Part A: Left nasal turbulent. Received in glutaraldhyde. Consists of a brush, sent to EM.

Part B: Right nasal turbulent. Received in glutaraldhyde. Consists of a brush, sent to EM.

Part C: Left nasal turbulent. Received fresh for cilia motility. Consists of a brush.”

Read the CILMOT chart and conclude dictation.