Electron Microscopy

Arrangements
Prior to surgery contact the F.C. Blodi Eye Pathology Laboratory (319-335-7095) and ask to speak with the ocular pathologist to determine if Electron Microscopy is necessary for the patient's care or if another test would be more informative.

Fixative
2.5% Glutaraldehyde and 10% Neutral Buffered Formalin

Special instructions
i. Prior to surgery obtain the following:
   a) 50 ml specimen container of 2.5% Glutaraldehyde.
      i) Label the specimen container with the patient's name, date of birth, physician's name, specimen type (i.e: cornea, left eye) and percentage of Glutaraldehyde in the bottle.
   b) A specimen container with the correct amount of 10% neutral buffered formalin in it.
      i) The amount of formalin in the container will vary with the size of the specimen; however, the fixative should be a minimum of ten times the volume of the specimen being fixed.
      ii) A formalin warning label on the specimen container.
      iii) Label with the patient's name, surgeon's name and type and location of the specimen (i.e: cornea, left eye) on the specimen container.
   c) An Ocular Pathology Consultation Request form.

ii. Immediately after removing the tissue from the patient, place half of the tissue into the 2.5% Glutaraldehyde and the other half of the tissue into the 10% Neutral Buffered Formalin.
   a) Fill out the Ocular Pathology Consultation Request form completely, using the instructions found under General Information on Collection and Handling of Specimens.
      i) When filling out the request form make sure to indicate that one specimen is in 2.5% Glutaraldehyde and that the other is in 10% neutral buffered formalin (i.e.: A. corneal biopsy, left eye in 2.5% Glutaraldehyde for EM studies, B. corneal biopsy, left eye in 10% neutral buffered formalin).
   b) If possible, the specimen in 2.5% Glutaraldehyde should be refrigerated until the specimen is shipped to the F.C. Blodi Eye Pathology Laboratory. The 10% neutral buffered formalin specimen can stay at room temperature or can be refrigerated.
   c) Both specimens and requisition should be shipped via overnight mail to the F.C. Blodi Eye Pathology Laboratory, unless the specimen is removed on Friday.
      i) If the specimen is removed on Friday, refrigerate the specimen until Monday.
      ii) On Monday morning ship the both the Glutaraldehyde, 10% neutral buffered formalin specimens and Consultation Requisition form via overnight mail to the laboratory.
   d) Send specimens to the address mentioned under General Information on Collection and Handling of Specimens.