Clinical Non-gyn
Procedure
nongyn27.01

Specimen Preparation Of Cell Blocks

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<tr>
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List all stakeholder(s) and dates of approval:

- **Stakeholder Name(s):** Jeffery Hadley  Date: July 29, 2010  Reviewed ☒  Revised ☐
- **Stakeholder Name(s):** Mark Magilner, MD  Date: July 29, 2010  Reviewed ☒  Revised ☐
- **Stakeholder Name(s):** Jeffery Hadley  Date: 8/22/11  Reviewed ☒  Revised ☐

Describe briefly the most recent revision made to this policy, procedure or protocol & why:
New Procedure

Purpose/Policy Statement:
Cell blocks are routinely utilized in cytologic diagnoses of fine needle aspiration biopsies (FNAB) and body fluids (pelvic, pleural, pericardial and ascites) which either contain tissue fragments or are very cellular. The cell block is generally an ancillary procedure and may add additional information about the specimen, supplementing the smear and/or cytospin preparations. Prepared cell blocks are processed in Histology where H&E and/or special stains are applied to the mounted specimen.

Definitions:
- n/a

POLICY CONTENT

PROCEDURE

NOTE: In preparation of cell blocks never use the specimen in it’s entirety. Ensure that there is at least 1ml of cellular material for possible additional testing and/or retesting.

1. For solid or cohesive fragments
   a. Use #2 pencil or laboratory pen (such as Statmark or Securline pen) to write accession number and part type if applicable on labeling portion of cassette.
   b. Patient last name and 1st initial must be on side of cassette.
   c. Place cell button material and/or fragments into tissue paper to secure the material.
   d. Note gross description of cell block and enter information into CoPath.
   e. Place specimen between two blue sponges in the cassette and lock lid in place.
   f. Place cassette into 10% formalin container.

2. For cohesive cellular sediment
   a. Use #2 pencil or laboratory pen (such as Statmark or Securline pen) to write accession number and part type if applicable on labeling portion of cassette.
   b. Patient last name and 1st initial must be on side of cassette.
   c. Centrifuge at 1800 rpm for 8 minutes.
   d. Decant supernatant.
   e. Using a metal spatula, scrape around the edges and the bottom of the tube to remove the cell button.
   f. Place cell button material and/or fragments into tissue paper to secure the material.
   g. Note gross description of cell block and enter information into CoPath.
   h. Place specimen between two blue sponges in the cassette and lock lid in place.
   i. Place cassette into 10% formalin container.
3. For discohesive cellular sediment
   a. At the beginning of shift, place HistoGel in block heater and heat to 60 Degrees C to turn gel to liquid.
   b. Use #2 pencil or laboratory pen (such as Statmark or Securline pen) to write accession number and part type if applicable on labeling portion of cassette.
   c. Patient last name must be on side of cassette.
   d. After using fluid to prepare any needed slides, add equal amounts of 10% formalin to appropriately labeled centrifuge tube containing remaining specimen. Mark tube with F for identification of fixative mixed with sample. (see note above).
   e. Centrifuge at 1800 rpm for 8 minutes.
   f. Decant supernatant into separate labeled vortex tube to ensure original specimen is not contaminated by Formalin.
   g. If cell button is still not cohesive use clean disposable pipet and add 1-3 drops of liquid HistoGel but try not to add more than ½ the volume of the button if possible.
   h. Let button with HistoGel cool until HistoGel is in a solid state (the specimen can be placed in the non-gyn refrigerator to cool faster).
   i. Using a metal spatula, scrape around the edges and the bottom of the tube to remove the cell button.
   j. Place cell button material and/or fragments into tissue paper to secure the material.
   k. Note gross description of cell block and enter information into CoPath.
   l. Place specimen between two blue sponges in the cassette and lock lid in place.
   m. Place cassette into 10% formalin.
   n. At the end of shift, place unused HistoGel back in Non-gyn refrigerator.

4. Prepared cell blocks must be delivered to the histology laboratory prior to the final loading of the embedding processor each night.

REPORTING RESULTS:

1) The worksheet or requisition should be stamped with “cell block.”

2) The gross description of the material for cell block including the size measured in centimeters, color, number of fragments, etc. are entered in CoPath. If a specimen is received with more than 1 part type write the accession number and part type (example m10-0000-1) on the cassette. Each cassette will have its own description recorded under the gross description in CoPath.

3) The case will be held until the cell block slides are complete, unless a preliminary report is requested. Cases where a preliminary report is requested are given to a pathologist for initial interpretation and phone consultation.

Equipment/Supplies (If Applicable):
1) Equipment:
   a. Megacentrafuge
   b. Block heater

2) Supplies:
   a. Tissue cassette - lilac color (for cytopathology specimens)
   b. Container of formalin for transport and storage of cassette with cell block material prior histological processing
   c. Tissue paper
   d. Use #2 pencil or laboratory pen (such as Statmark or Securline pen) to write accession number and part type if applicable on labeling portion of cassette.
   e. Metal spatula
   f. Cell block sponges
   g. HistoGel
   h. Disposable Pipet

SPECIMEN
1) Moderate to large sized fragments or clots with good cohesion.
2) Smaller shredded material that does not dissolve itself when re-suspending cellular sediment with pipette.
3) Cohesive cell buttons

REAGENTS OR MEDIA

   b. Reagents
      a. 10% buffered formalin.
      b. HistoGel

Form Name & Number or Attachment Name (If Applicable):
nongyn27

Author Position:
Operations Manager

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Medical Director
Operations Manager

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n/a

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If yes, insert requirement information here:

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