Instructions for Use

Specimen Collection

1. Cytospin Collection Fluid is an excellent fixative for ALL cytologic specimens.
2. Use full strength, do not dilute.
3. Collect the specimen in an equal or greater volume of fixative to ensure optimal preservation.
4. After the specimen is collected, cap the container or test tube.
5. The specimen should be labeled with patient identification, source of specimen and the date.
6. Transport to the laboratory for further processing.

Special Techniques

1. Mucoid specimens – Adequate agitation immediately following collection will disperse the mucus throughout the fluid, preventing large amounts of mucus from coagulating. This will make the cellular elements easier to discern microscopically, as they will not be masked by the mucus.
2. Brushings from Endoscopy, Bronchoscopy, and Cytoscopy – In addition to the smears prepared during these procedures, a fluid specimen can be generated for processing with the Cytospin. Use a small specimen container or test tube filled with approximately 10 mL of Cytospin Collection Fluid. Agitate the brush until it appears that all cells are dislodged. If a disposable brush is used, it may be cut off into the fluid, the container capped, and shaken aggressively to remove the cells from the brush.
3. Fine Needle Aspiration Biopsies – If a cystic area is being aspirated, the fluid should be expelled through the needle into a specimen collection cup and mixed with an equal volume of Cytospin Collection Fluid. If a solid lesion is being explored, a fluid specimen can be created. Following the preparation of direct smears, rinse the needle in a collection cup or test tube containing Cytospin Collection Fluid. Return to lab for processing on the Cytospin.

Specimen Preparation for the Cytospin

1. If a Cytology specimen is received in the laboratory without a fixative, IMMEDIATELY add an equal volume of Cytospin Collection Fluid and cap. Note in patient record how specimen was received.
2. Specimens of less than 50 mL should be diluted up to that amount with Cytospin Collection Fluid.
3. Collect the specimen in an equal or greater volume of fixative to ensure optimal preservation.
4. Carefully pipette or decant the supernatant.
5. Add 2-5 mL of Cytospin Collection Fluid to the cell button.
6. Cap the tube and re-suspend the button by vortexing.
7. Transport to the laboratory for further processing.

Processing the Slides

As with any fixative of this type, the carbowax must be removed from the cells before staining. This is accomplished by soaking the slides in alcohol (95%) for 15 minutes. Staining may be carried out with any routine or special cytologic procedure. Microscopically, the cells will exhibit well-preserved nuclei and normal staining characteristics.

General Comments

The alcohol in Cytospin Collection Fluid dehydrates the cell, causing it to shrink slightly. This process sharpens nuclear detail and provides the chromatin patterns routinely seen in cytologic preparations. The carbowax in Cytospin Collection Fluid infiltrates and supports cellular structure, helps maintain nuclear detail, and guards against accidental air drying. When slides prepared with carbowax are air dried, the cells firmly adhere to the slide, preventing loss of cells during the staining process.

Specimens collected in Cytospin Collection Fluid may be stored for days or weeks with no adverse effect, as may the unstained slides prepared from these specimens. Extra slides can be prepared for future use (i.e. special stains for additional diagnostic data.)