

Blanchard Valley Health System

Blanchard Valley Hospital

1900 South Main Street, Findlay, OH 45840

Laboratory Services

Collection of Sputum Specimens for Cytology (LTR33143)

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COLLECTION OF SPUTUM SPECIMENS FOR CYTOLOGY

PRINCIPLE

Microscopic examination of sputum specimens may assist in the early detection of respiratory tract neoplasms and infection. Correct collection methods are essential to ensure proper sampling of the lower respiratory tract.

POLICY

This procedure provides guidelines for the proper collection, preservation, and transport of sputum specimens to the Cytology Department. It pertains to specimens that are submitted for cytologic evaluation only. If other tests are required (e.g., cultures, chemistry), please refer to the Lab Collection Manual or contact the laboratory department concerned for instructions regarding their specific needs for specimen collection.

During second, third, weekend, or holiday shifts, the specimen should be taken to the main lab processing area.

SPECIMEN

Patient preparation: Early morning specimens are preferred and should be collected whenever possible. Prior to collection of the sputum specimen, the patient should brush their teeth and rinse their mouth out with water. This rids the oral cavity of any unnecessary debris that may be seen microscopically.

Type: Sputum

Handling Conditions:

1. For specimens collected within the BVH network, use "orders +add" in the main menu of Power Chart to request cytology testing. Enter Pathology Cytology Request in the search box and complete the required fields in yellow (i.e. Procedure, Clinical History, and Specimen Description) at the bottom of the screen. If additional special studies are required, these must be entered in the "Special Studies Requested" field. When finished, be sure to sign the order by using the sign button in the bottom right corner of the screen. Retrieve the specimen label from the designated printer and place it on the specimen container. If a specimen label is not available, please ensure that the following information appears on the specimen container: patient name, date of birth, collection date and time, and type of specimen (e.g. sputum).

For specimens collected outside of the BVH network (i.e. non-BVH owned physician offices), properly complete a non-gyn cytology requisition and mark the line provided for sputum specimens. Please include the following information: patient name, date of birth, address, social security number, date of collection, pertinent clinical history, and the

name of the attending Physician or authorized agent. Also, please include a copy of the patient's insurance information and/or insurance card whenever possible.

Please provide as much pertinent patient information as possible on the requisition form (e.g. history, present complaint, previous radiation or chemotherapy treatment, etc.). This information is extremely important for making a proper diagnosis.

2. Identification Needed: All specimen containers must be properly labeled (i.e. patient name, date of birth, date and time of collection, and specimen type).
3. Collected By: Attending Physician or authorized agent.
4. Transportation: Specimens submitted for cytologic examination must be delivered to the Cytology Department as soon as possible following collection. If immediate transport is not possible, please refrigerate the specimen in the interim.
5. Preservation: None, immediate processing. If the specimen arrives when the department is closed, a laboratory staff member should add 30 ml of CytoLyt solution to the specimen. A container of CytoLyt solution is kept on the counter in the Cytology Processing room. The specimen container should be labeled as PRESERVATIVE ADDED and left on the counter with the corresponding order form (if applicable). Specimens that arrive in the department more than two hours following collection and those that have not been preserved may be considered to be less than optimal for diagnostic evaluation.

EQUIPMENT AND MATERIALS

Equipment: None.

Materials: An empty sputum collection cup.

PROCEDURE

1. The patient should be instructed to sit in an upright position if physically possible. Deep breathing (diaphragmatic) and vigorous coughing will help to bring up secretions from the outer bronchial tree.
2. All secretions should be deposited into an open cytology collection container.
3. Secretions may range in color from whitish-tan to red (signifies the presence of blood). Clear material indicates contamination of the specimen with saliva. The patient should continue to attempt to produce an adequate specimen.

REPORTING RESULTS

Smears and cell blocks will be reported in the routine manner for Cytology and Surgical Pathology. Due to processing factors, reports are not routinely issued for a minimum of 24 hours after the specimen has been received by the department. If there are any questions, please feel free to call the Cytology Department at ext. 5814 and speak with a Cytotechnologist or a Pathologist regarding this procedure.

REFERENCES

Greenberg, S. Donald, Respiratory Infections and Other Benign Lesions, in Comprehensive Cytopathology & Aspiration Biopsy, Ibrahim Ramzy, ed., pp 133, Appleton & Lange, East Norwalk, 1990.

Johnson, William W., and Elson, Craig E., Respiratory Tract, in Comprehensive Cytopathology, Marluce Bibbo, ed., pp 321, W.B. Saunders, Philadelphia, 1991.