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**MODERN EXAMINATION
TECHNIQUE IN PULMONOLOGY**

Abstract book

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DIAGNOSTICAL USE OF BRONCHOGRAPHY

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Introduction. A bronchography is a radiographic (x-ray) examination of the interior passageways of the lower respiratory tract. The structures of the lower respiratory tract, which include the larynx (voice box), trachea (windpipe), and bronchi (larger branching airways to the lungs), become visible on x-ray film after contrast dye is instilled through either a catheter or bronchoscope (narrow, flexible, lighted tube) into these areas. Contrast dye is a substance that causes a particular organ, tissue, or structure to be more visible on x-ray or other diagnostic images.

The contrast dye is released as the catheter or bronchoscope is inserted through the nose or mouth and advanced down the throat into the trachea and bronchi. The contrast dye forms a coating on the lining of the interior walls of these structures, thus outlining their anatomy on x-ray. In addition, abnormalities such as tumors, cavities, cysts, and obstructions may be revealed.

Indications for the Procedure. A bronchography may be performed to diagnose structural or functional abnormalities of the larynx, trachea, and/or bronchi. Abnormalities may include, but are not limited to, the following:

- bronchiectasis - an irreversible enlargement of the bronchi as a result of deterioration of the muscle and elastic tissue of the bronchial walls. Generally, this is the result of chronic inflammation from various causes.
- hemoptysis - coughing up blood
- tracheoesophageal fistula - abnormal tract between trachea (windpipe) and esophagus (hollow tube used for swallowing)
- tumors (abnormal growths)
- chronic pneumonia or bronchitis

Risks of the Procedure. As with any invasive procedure, complications may occur. Complications related to bronchography may include:

- infection or pneumonia
- airway obstruction from the contrast dye in patients with emphysema or chronic bronchitis
- bronchospasm or laryngospasm from the contrast dye in patients with asthma

Contraindications for bronchography may include pregnancy, a productive cough, acute respiratory infection, and respiratory insufficiency.

Coughing and/or sputum in the airways may also interfere with a bronchography.