



Interventional Pulmunology Basic Training Course Program
National Research Institute of Tuberculosis and Lung Diseases (NRITLD)
Shahid Beheshti University of Medical Sciences
Tehran, Iran



Vision

We are determined to gain international fame as an active prosperous center in providing medical services in the field of Interventional Pulmunology. Holding training courses and workshops and the related retraining scores and facilitate the notification processes and participation in training courses and workshops affiliated to Masih Daneshvari Hospital, Shahid Beheshti University of Medical Sciences.

Mission:

Interventional Pulmunology Group is committed to;

- Provide better and even the first-class education.
- Facilitate exchange of ideas and information through scientific meetings and publications.
- Facilitate and promote research in matters of common interest for outstanding researchers.
- Advise, collaborate and participate with governmental and non-governmental agencies in matters of common interest.

Leadership:

Led by Dr. Arda Kiani and Dr. Atefeh Abedini, the Interventional Pulmonology Programs at Masih Daneshvari Hospital focuses on minimally invasive basic and advanced diagnostic and treatment procedures. Dr. Behrooz Farzanegan leads the anesthetic pre-procedures.

Duration:

We provide a two-month educational course for Interventional Pulmunology. Educational programs are developed to cover four different groups including fellows, residents, interns and medical students as given below:

- Fellows:
- Residents:
- Interns:
- Medical students
- Ph.D. by research students

Interventional Pulmonology Basic Training Course Program

Interventional Pulmonology is an area of medicine dedicated to the minimally invasive procedural aspects of thoracic disease for diagnosis and treatment. Patients have both benign and malignant non-cardiac diseases of the chest. Patients will typically have primary or metastatic tumours of the chest, mediastinum or pleura, other pleural disease, complex airway abnormalities or other chest disorders requiring procedural intervention. The value of IP skills is now clear to our patients and institutions and there is no longer a need for us to explain what interventional pulmonology is and what we bring to the table.

Our team focuses on obtaining a diagnosis and treatment plan in the most efficient, rapid and least invasive manner.

- Holding educational and training programs with peers.

Basic Training Course

Rigid bronchoscopy. In rigid bronchoscopy, a long metal tube (rigid bronchoscope) is advanced into a person's windpipe and main airways. The rigid bronchoscope's large diameter allows the doctor to use more sophisticated surgical tools and techniques. Rigid bronchoscopy requires general anesthesia (unconsciousness with assisted breathing), similar to a surgical procedure.

Flexible bronchoscopy. Bronchoscopy is the most common interventional pulmonology procedure. During bronchoscopy, a doctor advances a flexible endoscope (bronchoscope) through a person's mouth or nose into the windpipe. The doctor advances the bronchoscope through the airways in each lung, checking for problems. Images from inside the lung are displayed on a video screen. The bronchoscope has a channel at its tip, through which a doctor can pass small tools. Using these tools, the doctor can perform several other interventional pulmonology procedures

Cryobiopsy

Cryobiopsy in the Diagnosis of Interstitial Lung Diseases and

Sonography of pleural space

Ultrasound in the Diagnosis & Management of Pleural Effusions and

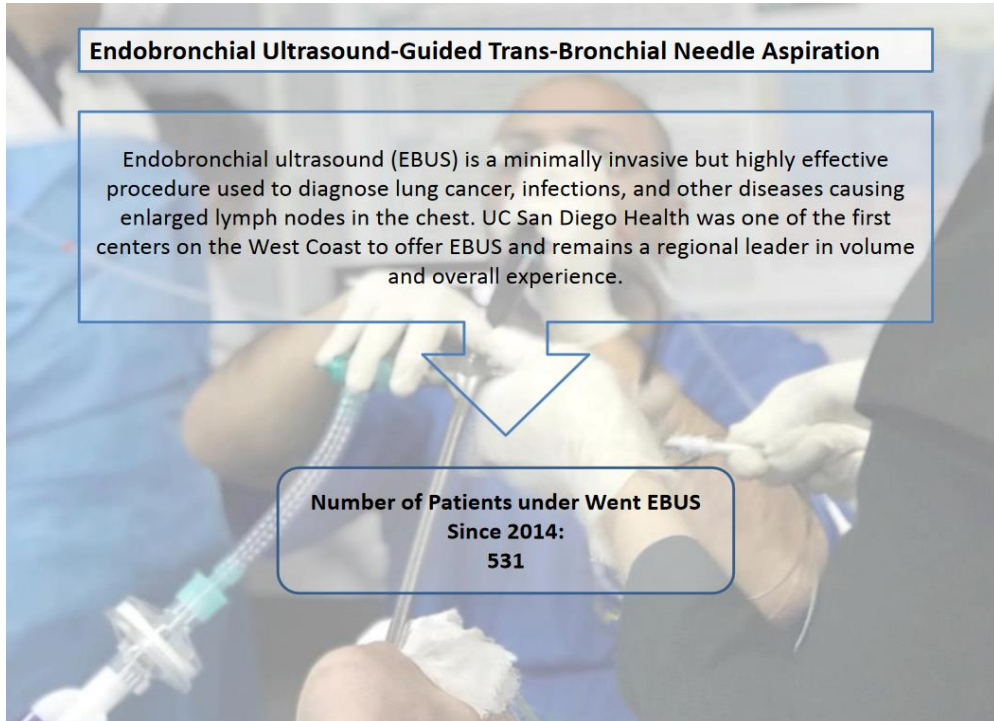
How to overcome Interventional Pulmonology Risks and Limitations

How to overcome uncommon complications of interventional pulmonology procedures include:

- Pneumothorax (collapsed lung)
- Bleeding
- Oversedation, leading to pneumonia or the need for temporary life support

Interventional pulmonology procedures are generally safer and have a shorter recovery time, compared to surgery. However, surgery remains the best option for diagnosis and treatment of many lung conditions.

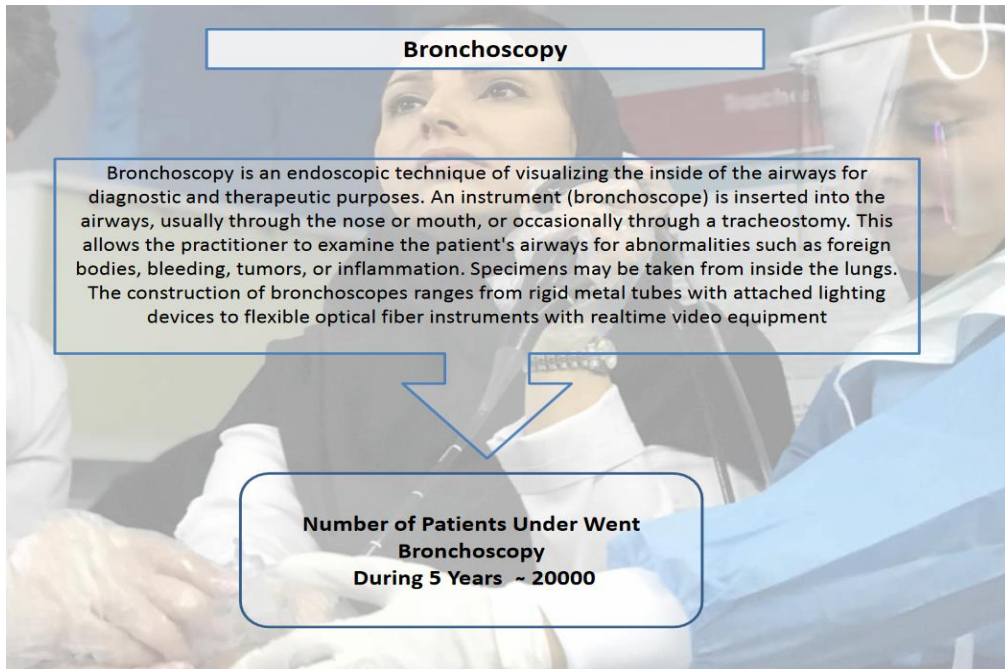
Our Strengths



Endobronchial Ultrasound-Guided Trans-Bronchial Needle Aspiration

Endobronchial ultrasound (EBUS) is a minimally invasive but highly effective procedure used to diagnose lung cancer, infections, and other diseases causing enlarged lymph nodes in the chest. UC San Diego Health was one of the first centers on the West Coast to offer EBUS and remains a regional leader in volume and overall experience.

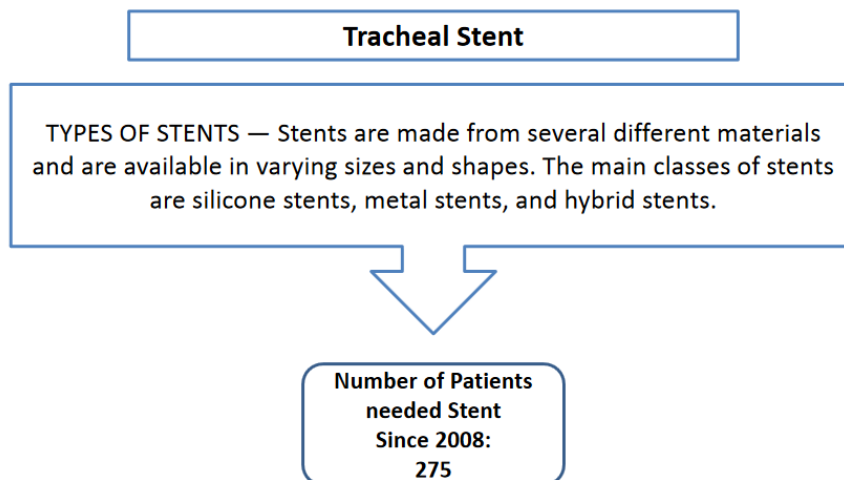
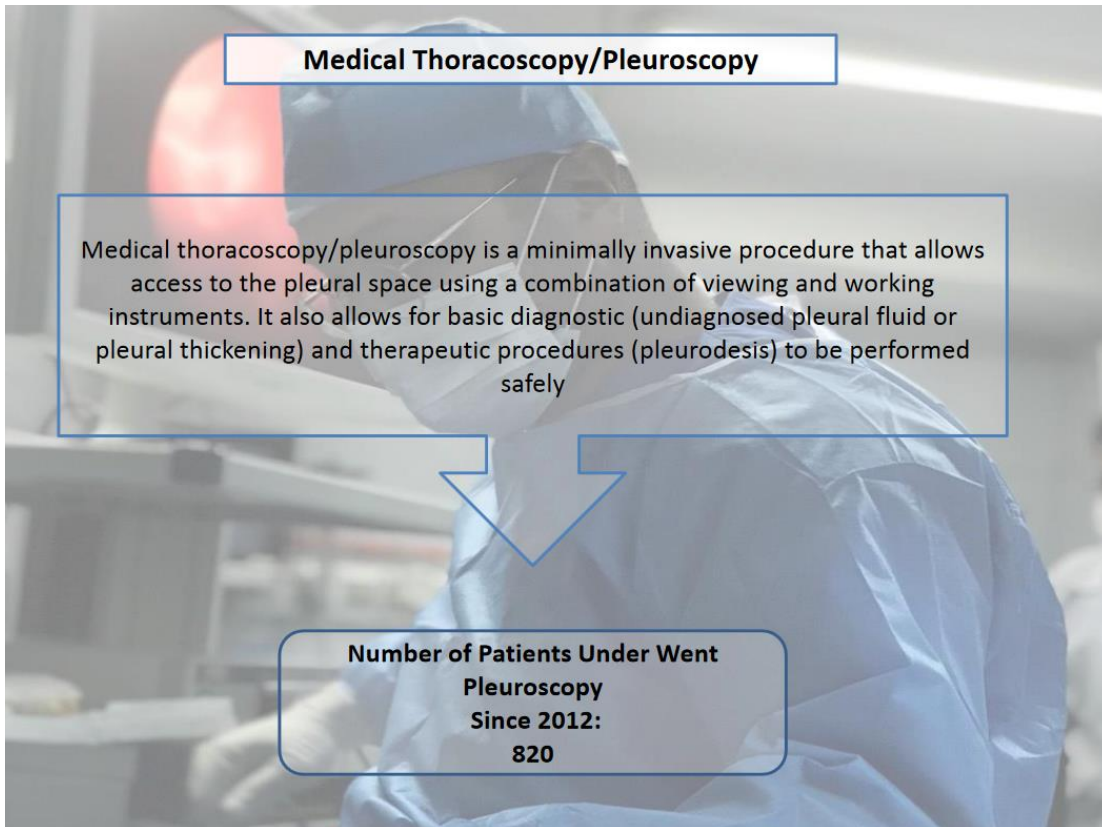
Number of Patients under Went EBUS Since 2014: 531



Bronchoscopy

Bronchoscopy is an endoscopic technique of visualizing the inside of the airways for diagnostic and therapeutic purposes. An instrument (bronchoscope) is inserted into the airways, usually through the nose or mouth, or occasionally through a tracheostomy. This allows the practitioner to examine the patient's airways for abnormalities such as foreign bodies, bleeding, tumors, or inflammation. Specimens may be taken from inside the lungs. The construction of bronchoscopes ranges from rigid metal tubes with attached lighting devices to flexible optical fiber instruments with realtime video equipment

Number of Patients Under Went Bronchoscopy During 5 Years ~ 20000

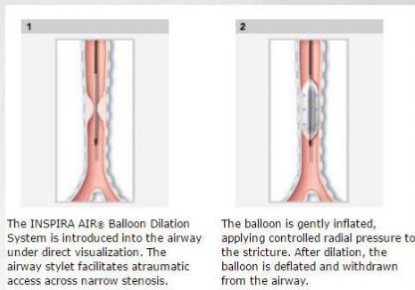
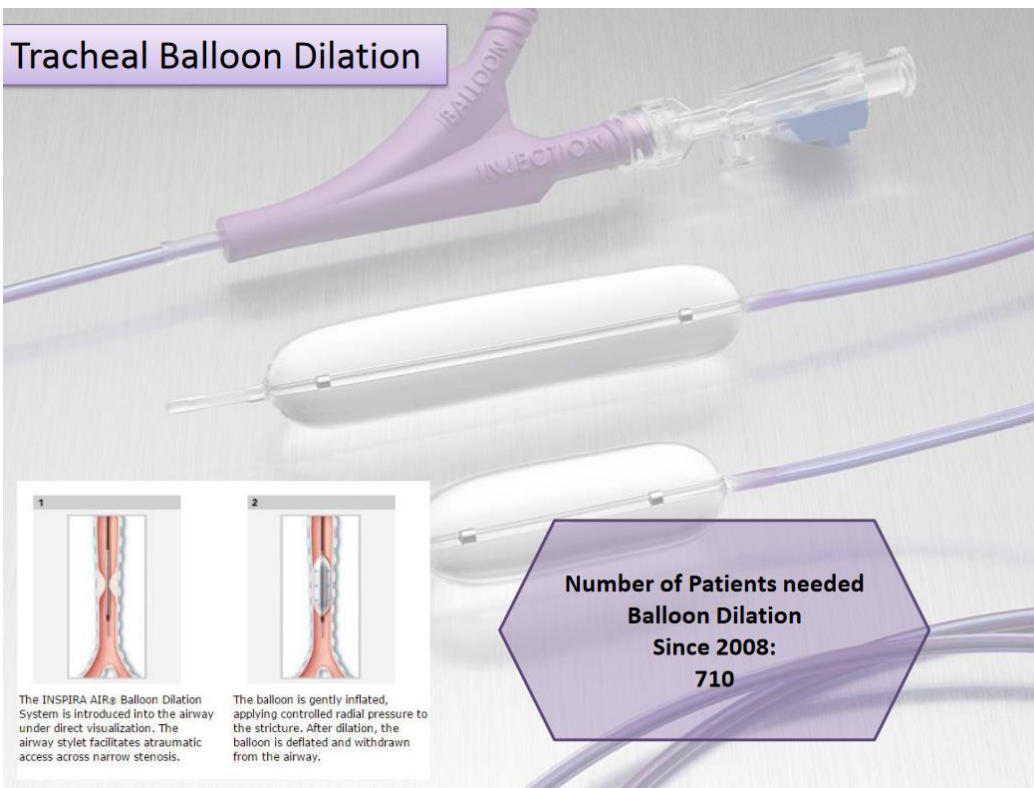


PATIENT SELECTION

Indications — There are many indications for airway stenting , including the following:

- Malignant tracheobronchial obstruction in a patient who is undergoing external beam radiation and/or chemotherapy, or who has exhausted his or her curative therapeutic options.
- Malignant tracheobronchial obstruction that persists despite endobronchial resection and dilation.
- Postintubation subglottic stenosis that fails endobronchial resection and dilation.
- Benign tracheal or bronchial stenosis in a patient who is not a surgical candidate, who is awaiting a response to systemic therapy, or for whom surgical resection is pending.
- Localized severe expiratory central airway collapse, such as tracheobronchomalacia or selected cases of excessive dynamic airway collapse of any etiology.
- Anastomotic stricture or dehiscence following lung or heart-lung transplantation.
- Tracheal- or bronchial-esophageal fistula

Tracheal Balloon Dilation



CRYOBIOPSY

Number of
Patients under
Went
CRYOBIOPSY
Since 2012:
155



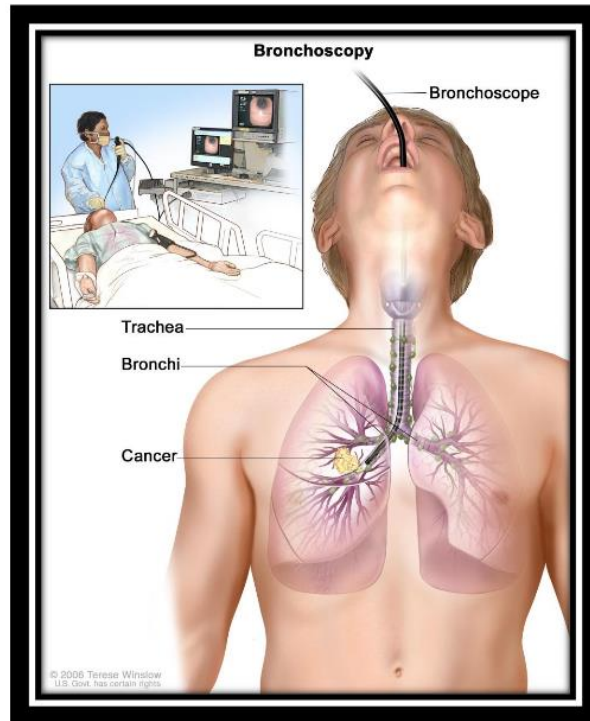
Rigid Bronchoscopy



The rigid Bronchoscopy had been started by **Dr Masjedi & Dr Jabbari** in **1991**. Number of patients who under went the rigid Bronchoscopy during these years is **2770**.

Injection Chemotherapy Endobronchial

1200 injections
had been
conducted during
15 years



Hot technique: Cauter – APC

The Cauter & APC had been started by **Dr Masjedi & Dr Jabbari** in **1989**. Number of patients who under went these procedures during these years is **2500**.

THERMOPLASTY

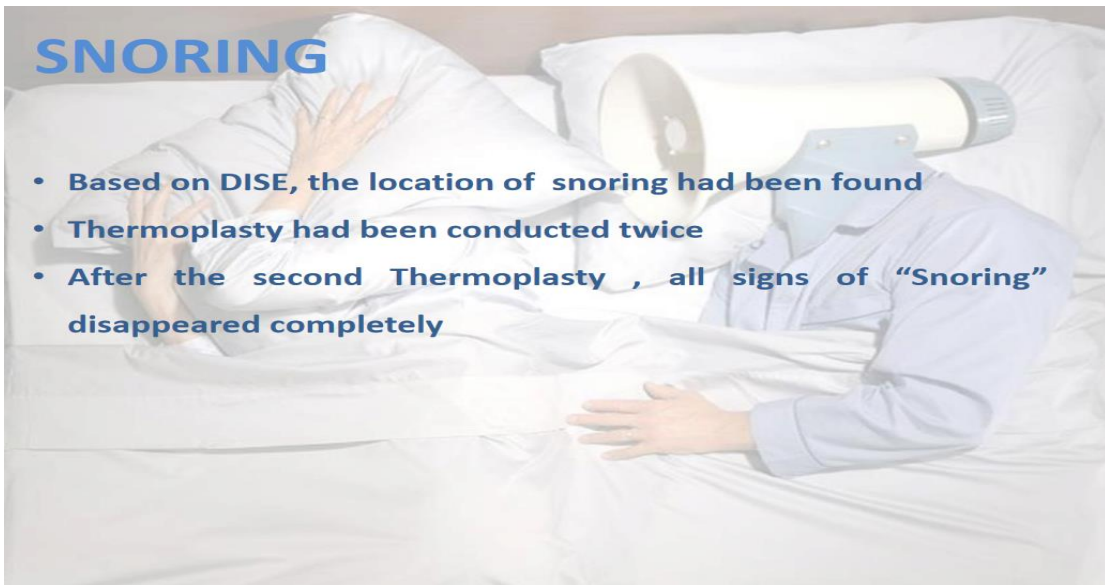


6 cases: due to severe asthma
1 case: due to snoring

Bronchial **thermoplasty** is a treatment for severe **asthma** approved by the FDA in 2010 involving the delivery of controlled, therapeutic radiofrequency energy to the airway wall, thus heating the tissue and reducing the amount of smooth muscle present in the airway wall.

SNORING

- Based on DISE, the location of snoring had been found
- Thermoplasty had been conducted twice
- After the second Thermoplasty , all signs of “Snoring” disappeared completely



Foreign Body Aspiration Pediatrics Management:
12 cases



Research & Development

Due to presence of proficient researchers and experienced scientific staff and with the aim of serving the community, we support all interested researchers to implement and promote those research projects, new discoveries and innovations, which are in the line with Interventional Pulmunology.

Contact

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To make an appointment with our Interventional Pulmunology Programs, please call +98-21-2712031

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