## The Thoracic Diagnostic Assessment Program

Your doctor has questions about the health of your chest and lungs and has referred you to the Thoracic Diagnostic Assessment Program (DAP). This handout offers information on:

- The care provided by the Thoracic DAP team
- The anatomy of your lungs and chest
- The tests used to look at the health of your lungs and chest
- How to get ready for your tests and appointments

### What is the Thoracic Diagnostic Assessment Program (DAP)

The Thoracic DAP is coordinated through the Durham Regional Cancer Center at Lakeridge Health Oshawa. The Thoracic DAP team includes doctors and nurse navigators who see patients at Lakeridge Health - Oshawa site and the Peterborough Regional Health Center. The Thoracic DAP team works with you and your healthcare team to schedule appointments needed to find answers to questions about the health of your lungs and chest.

#### The Thoracic DAP team

### 1. A Nurse Navigator

The Nurse Navigator will:

- Work with your healthcare team to make sure your tests are booked as soon as possible. Your appointments will be booked together when possible to lessen the time and distance you need to travel.
- Give you the information you need to be ready for tests and procedures.
- Talk to you about the next steps in your care.
- Answer your questions.

Call the Nurse Navigator at: 905-576-8711 or 1-866-338-1778 at extension
from 8 am to 4 pm, Monday to Friday - except on holidays.

### 2. A thoracic surgeon

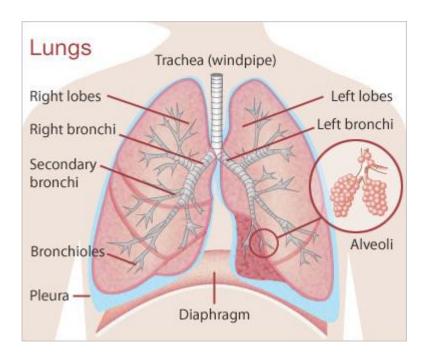
A thoracic surgeon is a doctor who performs operations on the lungs, esophagus and other organs in the chest.

#### 3. A respirologist

A respirologist is a doctor who specializes in the diagnosis and treatment of lung diseases.

### **Anatomy of your lungs**

You have 2 lungs located in your chest. You have 1 lung on each side. Your right lung has 3 lobes (parts). Your left lung has 2 lobes. You breathe air into your windpipe (trachea). Your windpipe divides into 2 tubes (bronchi) that lead to the left and right lungs. See the picture below.



In your lungs, the bronchi become smaller (bronchioles) until they reach your air sacs (alveoli). The job of the alveoli is to add oxygen to your blood and take waste gases out. The waste gases are removed from your body when you breathe out.

## Tests you may have

Your thoracic surgeon or respirologist orders the tests you need. You may not need to have all the tests listed below. You are given a follow up appointment with your thoracic surgeon or respirologist to talk about your test results.

# Laboratory (Blood) tests

You may need to have blood tests to provide your Thoracic DAP team information about your blood counts, electrolytes and your liver and kidney function.

# Pulmonary Function Test (Breathing Test)

A pulmonary function test measures how well your lungs are working and how well you may tolerate surgery or other treatments. This test takes about 15 to 45 minutes.

# PET (Position Emission Tomography) /CT Scan

This test is completed at another hospital. During a PET/CT Scan, you are given an injection of a radioactive material called a tracer. This injection is given through an intravenous line (IV) put into one of your veins. The tracer collects in an area of your body, where it gives off a small amount of energy. The scanner finds this energy and makes a picture of your body's organs and tissues, showing areas where this tracer 'lights up' during the scan.

For this test, you lay on a table. This test takes about 30 to 45 minutes. Time is also needed for the planning of your PET/CT Scan. Your appointment is about 3 hours in total. You are given information on how you need to prepare for this test. Tell your nurse navigator if you are diabetic as this changes how you need to prepare for this test.

# MRI (Magnetic Resonance Imaging)

This test is completed in the MRI Department of the hospital. An MRI uses radio waves, a powerful electromagnet and a computer to make pictures of your body's tissues and structures. You may need to receive an injection of dye (called contrast) to make the pictures of your organs and other structures show up better. This depends on what part of your body is being scanned. You will be asked to lay on a table that goes inside the MRI machine.

You cannot move any part of your body while you have an MRI. You hear loud tapping noises while the MRI is being done. This test takes about 30 to 45 minutes.

# Bone Scan

This test is done in the Nuclear Medicine department of the hospital. A bone scan is completed in 2 stages. For the first stage, you are given an injection of a radioactive tracer. This tracer helps make your bones show up better for the pictures taken in the second stage of the scan. You may leave the Nuclear Medicine department after you receive the injection. You need to return to the Nuclear Medicine department 3 hours later to have the second stage of your bone scan done.

## Procedures you may have

These are procedures where samples of fluid, cells or tissue are removed to be looked at under a microscope. Your nurse navigator or a clerk provides you with the information you need about these procedures.

Fine Needle Aspiration (FNA) or Needle Biopsy of the Lung
A needle is put into an area of your body to remove a small sample of your cells. Before the needle is put in, this area of your body is numbed with freezing.
Ultrasound guided biopsy
An ultrasound is used to guide the needle to the area being biopsied.
CT Scan (Computerized Axial Tomography) guided biopsy
A CT Scan is used to guide the small needle to the area or nodule being biopsied. This is done in the Radiology Department of the hospital. You can expect to be at the hospital for about 4 to 6 hours.
<u>Thoracentesis</u>
A thoracentesis is a procedure that lets a buildup of fluid between your lungs and chest wall (called a pleural effusion) drain out. A thin needle with a small tube attached to it is put in between your ribs and into the space around your lung. The fluid drains out through the small tube. This procedure makes it easier for you to breathe, and allows for the collection of a fluid specimen for testing.
Mediastinoscopy
A small opening is made at the bottom of your neck by a thoracic surgeon. Your thoracic surgeon uses a long thin tube with a camera to see the inside of your upper chest in the space between your lungs. During this procedure, lymph nodes along your windpipe are examined and a small sample may be removed. This is a day surgery procedure using a general anesthetic. You need to have someone drive you home from the hospital.
Bronchoscopy
A bronchoscope (a thin, lighted tube) is put into your mouth and down your windpipe to look into your breathing passages. Through this tube, your thoracic surgeon or respirologist collects cells or small samples of tissue to be looked at under a microscope. You are given medication (sedation) to help you relax and make you sleepy while you have the bronchoscopy done. You will be at the hospital for 2 to 3

hours to have this procedure done. You need to have someone drive you home from

the hospital.

# Endobronchial Ultrasound (EBUS)

During an EBUS procedure, a bronchoscope (a thin, flexible tube) with an ultrasound device is put into your mouth and into your trachea. This allows your doctor to see inside and around your: trachea (windpipe), mediastinum (the space between your lungs) and your lungs. During the EBUS procedure, small samples of your lymph nodes may be removed (biopsies). This procedure is used to diagnose lung cancer, infections, and other diseases that cause lymph nodes in your chest to grow.

## Waiting for tests, appointments and results

Waiting for tests, appointments and test results can be difficult for you and your family members/partners-in-care. It is normal to feel worried and anxious.

#### What you can do while you wait

- Make sure we have the right phone number to call you.
- At the time of your test, ask when and how you will be told about the results.
- Keep your normal routine.
- Do things to help your body have the energy it needs to cope with stress. This
  includes: eating a healthy diet, getting a good night's sleep and reducing the
  amount of caffeine or alcohol you drink.
- Go for a walk. This may help you relax.
- Relax your mind by doing relaxation exercises or meditation.
- Talk about what is happening and how you are feeling with a family member, friend or spiritual advisor. Ask your nurse navigator to refer you to a social worker.
- Make an appointment to talk to your family doctor about what is happening.
- Have someone go with you to appointments. It can be hard to remember all the information you are given.

Talk to a member of your healthcare team if you have questions or do not understand any information in this handout.

For more information, go to the Cancer Care pages on the Lakeridge Health website at lakeridgehealth.on.ca. Click on Our Services > Diagnosis > Thoracic DAP.

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