Breathe In ... Breathe Out ...

Shore Memorial introduces new technology for diagnosing lung cancer

Bennett Ojserkis, MD, a pulmonologist on Shore Memorial's medical staff, is the first pulmonologist in the region to use electromagnetic navigation bronchoscopy to diagnose cancer.

Imagine a new technology that helps doctors explore deep inside the lungs without performing surgery. Now, thanks to a new adjunct procedure to the standard bronchoscopy—a test where the doctor inserts a bronchoscope (a flexible telescope) into the lungs—pulmonologists can examine distant parts of the lungs with more detail than ever before. All this is done without increasing the invasiveness of the procedure or the risk to the patient.

"It's important to look beyond the main bronchial tubes where the standard bronchoscopy can 'see' because lung cancer isn't limited to the main airways," says Bennett Ojserkis, MD, a pulmonologist on Shore Memorial Hospital's medical staff who is the first pulmonologist in the region to use this advanced technology to diagnose cancer. "In fact, two-thirds of lung cancers, especially curable ones, are located in the smaller tubes, beyond the reach of the standard instrument."

> **"I'm very excited to work with this emerging, sophisticated technology," says Bennett Ojserkis, MD.**

Reaching Further

Ordinarily, if cancer is suspected, a patient may undergo a standard bronchoscopy. During this procedure, a physician visually inspects abnormal tissue and takes samples for a biopsy from the hollow breathing tubes in the lungs where cancers start. However, the 0.25 inch thickness of the standard bronchoscope prevents physicians from looking into the smaller branches of the lungs, where many cancers reside.

The new inReach™ system, which works with a standard bronchoscope, is smaller in diameter, longer in length and reaches beyond the large, central bronchial tubes.

Prior to performing a bronchoscopy, the doctor creates a personal 3-D map of

the patient's chest using a CT scan and special computer software. This enables him to mark and navigate a virtual "roadmap" of the patient's lung from a starting point in the main windpipe all the way to the suspicious lesion.

"By viewing these computer images, I'm able to know in advance what I'll see when I perform the procedure. I call this part the planning stage, because I map out the most direct route to the area of the lung I'm trying to examine. This computer mapping beforehand improves accuracy and reduces the time spent doing even a standard bronchoscopy," says Dr. Ojserkis.

Sophisticated Navigation

Just as a GPS navigation device provides drivers directions, the inReach system helps guide the physician's navigation of his biopsy instruments to the outer reaches of the lungs. The thin, steerable biopsy tube has a tiny electronic sensor attached to it. This sensor sends position signals back to a computer as it passes through a harmless electromagnetic field generated by a special mat under the patient's bed. That way, the "driver" knows where the biopsy tool is at all times on the 3-D map of the chest. Once the instrument arrives at the preplanned "destination," it is used to take several abnormal tissue samples for laboratory analysis.

"A needle biopsy runs a 30 percent chance of collapsing the lung. If a patient already has significantly compromised lungs, we hesitate to do that. Electromagnetic navigation bronchoscopy is a much better choice. The risk of a collapsed lung is only 3 percent, about the same as a standard bronchoscopy," says Dr. Ojserkis.

"I'm very excited to work with this emerging, sophisticated technology," says Dr. Ojserkis. "We're able to reach areas in the lungs without surgery and do things that can't be done with a fine needle biopsy." ■

FIND OUT MORE

Bennett Ojserkis, MD, will present "New Methods to Diagnose Lung Cancer" on Wednesday, Feb. 18, at noon at Greate Bay Country Club in Somers Point. The cost is $15 and includes lunch. Registration is required. Call 609/653-4500.

Back to Being Grandpa

For Bill Candy, it all started with a fever. A recent lung cancer survivor, Candy, 71, of Ocean City, was extra cautious of any changes or problems concerning his health. After taking antibiotics for several weeks, he saw no improvement, so his primary care physician ordered a CT scan of his lungs. The scan revealed a 6-centimeter-long mass across the left lobe of Candy's left lung.

Since the mass hadn't been there six weeks earlier during a checkup with pulmonologist Bennett Ojserkis, MD, his physician was concerned that his cancer had returned. Dr. Ojserkis suggested that Candy undergo a new adjunct procedure to the standard bronchoscopy to both examine the mass and take tissue samples for a biopsy.

The procedure revealed that Candy's mass was not cancer, but a very serious combined fungal and bacterial infection. After spending several weeks in the hospital, he was able to return home.

"The smaller size of the equipment let Dr. Ojserkis go into the smaller paths of my lungs to where the mass was. It allowed him to get a piece of it for the biopsy, and figure out what the problem was," says Candy.

Candy says that since the procedure and subsequent treatment, he's almost back to his old self. He enjoys working out three days a week, doing projects around the house and spending time on his boat fishing. Mostly, he's thrilled to spend time with his wife, Carole, three children and five grandchildren. "My wife and I both enjoy our grandkids very much," he says.

Bill Candy and his wife, Carole, of Ocean City are enjoying life again after a mass on his lung was found and successfully treated with the help of new technology at Shore Memorial Hospital.