What follow up should patients have after surgery for early lung cancer?

This is my first post on this wonderful site.

Recently I saw a patient who had undergone surgery for stage II Non-Small Cell Lung Cancer and was receiving chemotherapy with another cancer doctor. He came to me for a second opinion. Among the questions he had was what tests should he get after completing all his treatment.

I thought this will be a good topic for my first post. Patients who have completed treatment for stage I or II or III Non-Small Cell Lung Cancer could have a recurrence of the lung cancer or can develop a second lung cancer. For this reason a follow up at regular intervals is suggested. Two different organizations National Comprehensive Cancer Network (NCCN) and the American College of Chest Physicians (ACCP) have provided guidelines on this issue. Below I have summarized the recommendations from these two organizations-

Physical examination by the physician and CT scan of the chest every 4-6 months for the first 2 years and then once a year.

Recurrence of lung cancer tends to occur in the first 2-3 years after completion of treatment though in some patients the recurrence may occur later. Therefore in the first 2 years the scans are done more frequently. The reason only CT scans of the chest are done is that the common areas of recurrence are both lungs, adrenal glands (that are in the upper abdomen and included in a CT scan of the chest) and liver. The purpose of the CT scans of the chest is also to detect if the patient has developed a second lung cancer, separate from the first lung cancer. Any lung cancer patient has a risk of developing a second lung cancer though the risk is low. Both organizations do not specify for how many years should the CT scans be done though many doctors do scans for 5 years. A lot of patients ask for a PET scan. But there is no known value in doing a PET scan for routine follow up after completing treatment for early stage lung cancer.

Another important aspect of follow up of lung cancer patients is emphasizing smoking cessation. Most lung cancer patients have smoked in the past and therefore smoking cessation is not an issue. But a minority of patients continue to smoke even after lung cancer diagnosis. Continued smoking continues to increase a person’s risk of developing another lung cancer. Not to mention all the other health consequences of smoking including continued deterioration of the lung function.

Many lung cancer patients due to current or past smoking have a lung condition called COPD (chronic obstructive pulmonary disease). The reason to mention this is that shortness of breath may be a symptom in patients after lung cancer surgery. At least in some of the patients proper treatment of COPD may help this symptom. At our cancer center we tend to refer patients to lung specialists called pulmonologists for assessment and treatment of COPD even before lung cancer surgery.
Lastly I want to mention that some patients after lung cancer surgery may have chest pain at the site of the surgery for some months. The pain is usually a dull ache and increases with movements of the arm on that side. Patients naturally get worried about the pain. But generally it is from the healing tissue in the area of the surgery. Of course it is important that the patient bring the pain to the doctors attention particularly if the pain is getting worse.

Below is the link to the summary statement of ACCP for treatment of lung cancer. This statement includes the recommendations for follow up after treatment for early stage lung cancer.

http://www.chestjournal.org/cgi/content/full/132/3_suppl/1S