Cigarette Smoking, Asthma, and Emphysema

To the Editor:

I read with interest the recent report of Silverman et al (May 2003) about cigarette smoking among asthmatic adults. What impressed me most was their finding that, although 50% of current smokers admitted smoking worsens their asthma symptoms, only 4% stated that smoking was responsible for their current exacerbation. A similar scenario exists in patients with pulmonary emphysema. In my practice, I saw many patients with chronic cor pulmonale due to pulmonary emphysema who are invariably cigarette smokers. They continue to smoke, despite the obvious fact smoking made their cough worse. The invariable answer to my question why they continued to smoke if smoking made their cough worse was that cigarette-induced cough loosened their sputum. This seems to be a universal response of cigarette smokers, in both the United States and China where cigarette smoking is rampant.

In Chinese, *tiao tan* is the equivalent expression for loosening the phlegm. What I usually did for these patients in China was to ask them to perform a simple FVC test to measure the FEV₁ before and after they smoked a cigarette. I then showed how the FEV₁ fell instead of rising after they smoked a cigarette. Such a visual demonstration that cigarette smoking worsened instead of improving the airway obstruction usually did more good than my constant preaching of the harm of smoking. As they say in China, one picture is better than a thousand words.

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Symptoms in Cardiac Myxoma

To the Editor:

We read with interest the recent article by Acebo et al (May 2003). Myxoma is the most common primary cardiac tumor, and it is intriguing that in many patients myxomas do not cause symptoms but are detected as an incidental finding during an echocardiographic examination. It is useful to identify features of the tumor that are predictors of symptoms, in order to develop a better understanding of the mechanisms leading to the development of symptoms. We have performed an analysis of the clinical, pathologic, and echocardiographic features of cardiac myxomas that were surgically removed between 1976 and 1999 at the University of Ottawa Heart Institute. There were 54 patients (mean age, 53 ± 15 years) [± SD]. Of these, 25 patients had symptoms, and the common symptoms were dyspnea in 13 patients and embolism in 9 patients. Nine patients were asymptomatic. Two pathologic findings were more common in asymptomatic patients, namely the presence of calcification including bone, and the presence of glandular elements (p = 0.01 and p = 0.03, respectively). Regarding embolism, the pathologic predictors were absence of calcium (p = 0.004), absence of thrombus (p = 0.04), and polypoid shape (p = 0.04), whereas the only echo predictor was polypoid shape (p = 0.05). These observations were consistent with the findings of Acebo et al.

We agree with Acebo et al that echocardiography is a reliable method in the diagnosis of cardiac myxoma. It also provides additional insight regarding the potential of embolism. In asymptomatic patients, urgent surgical intervention is indicated. We believe that prompt surgical intervention is also justified in asymptomatic patients with polypoid myxomas so as to prevent embolism.

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Distal Intestinal Obstruction Syndrome After Surgery in Cystic Fibrosis

To the Editor:

We greatly appreciated the review by Gilljam et al (January 2003) on GI complications after lung transplantation in patients...
with cystic fibrosis (CF). Their experience mirrors our own: distal intestinal obstruction syndrome (DIOS) can be as important an issue after transplant in individuals with CF as management of pulmonary complications. In the initial days after lung transplant, the combination of high-dose narcotics, postoperative ileus, poor oral intake, and bed rest creates a risk for DIOS that makes the estimate of 20% incidence seem optimistically low. Gilljam et al1 wisely suggest “prevention and early medical treatment” to prevent DIOS after transplant, and report success with a routine of early enteral feeding and, if needed, administration of electrolyte GI lavage solution 24 h after transplantation.

We too have noted a dramatic effect of a preventive protocol on the incidence of DIOS after lung transplant in individuals with CF. We now start this preventive protocol prior to surgery. After having three consecutive CF lung transplants complicated after surgery by DIOS, we adopted a protocol that included all individuals with CF awaiting lung transplant having access at home to polyethylene glycol lavage solution (GoLytely; Braintree Laboratories; Braintree, MA). As soon as they are contacted to come to the hospital for their transplant because donor lungs are available, they immediately drink 2 L of polyethylene glycol lavage solution. Combining this approach with the steps recommended in the article by Gilljam et al1 has virtually eliminated the incidence of DIOS in our CF population immediately after transplant. This protocol has been adopted by other transplant centers, including the University of North Carolina at Chapel Hill, with similar success. Initial concern about patients drinking a large volume of liquid prior to surgery has been tempered by the much less complicated postoperative courses and the observation that several hours invariably lapse between patient notification and actual surgery.

The principles of prevention and early treatment espoused by Gilljam et al1 can be extended to apply to all surgeries in individuals with CF in which surgery will likely be followed by narcotic use and postoperative adynamic ileus. After having postoperative DIOS occur in individuals with CF undergoing cholecystectomy and other abdominal surgeries, we have now made pretreatment with polyethylene glycol lavage solution a standard part of preoperative preparation.

Kudos to Dr. Gilljam and coworkers for their thorough review of an underrecognized complication of CF. By applying their principles of prevention and early treatment for DIOS, we should be able to dramatically decrease the incidence of GI complications not only after lung transplantation in CF, but after all surgeries.

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Does the Predicted Postoperative FEV1 Formula Reflect the Real Value?

To the Editor:

I have just read the article by Beckles et al2 titled “The Physiologic Evaluation of Patients With Lung Cancer Being Considered for Resectional Surgery.” There was described a formula for calculating the percentage of predicted postoperative (ppo) FEV1 after lobectomy: ppoFEV1 = preoperative FEV1 \times (No. of segments remaining/total No. of segments). For lobectomy, there is a strong correlation between the postoperative FEV1 expressed as percentage of predicted and the actual values when the calculation is made depending upon the number of segments to be removed at lobectomy. The calculation needs to be modified if any segments are obstructed:

$$\text{ppo FEV1} = \frac{\text{pre-FEV1} \times (19 - a) - b}{19 - a}$$

where ppo = estimated postoperative, and where a = the number of obstructed segments to be resected and b = the number of unobstructed segments to be resected, which can easily be determined by bronchoscopy.

In the first formula, the calculated ppo FEV1 values are always almost 150 to 250 mL less than the values calculated by the second formula upon the existence of obstructed segments. In both situations, the preoperative FEV1 values are the same. This condition is very important for the patients with borderline preoperative FEV1 values. The patients who are accepted inoperable according to the first formula may indeed be in the operable group. For example, a patient is being planned to undergo left upper lobectomy: a:2 and b:3. Preoperative FEV1 value is 1.6 L. According to the first formula, ppo FEV1 = 1.184 L; according to the second formula, epo FEV1 = 1.318 L. The difference is 134 mL. The obstructed segments to be resected do not have any contribution to the preoperative FEV1. So, only the unobstructed segments to be removed should be taken into account while calculating the ppo FEV1. As a result, the first formula does not reflect the real value. In conclusion, the second formula should be used to calculate the percentage of ppo FEV1 in order to give the chance of operability to the patients with borderline respiratory functions.

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REFERENCES