operated on to get the diagnosis by frozen section in a few minutes by having a thoracotomy? If the answer, after undertaking a thoracotomy, comes back small cell carcinoma of perhaps a lymphoma, I assume the chest is then closed and the patient has benefited little from all that has been done. Transbronchial biopsy by an appropriately trained specialist would have avoided all the unnecessary procedures and risks mentioned above. In my experience, it is not uncommon even for large lesions not to be seen by routine endoscopy, but yet they can be reached fairly easily transbronchially under fluoroscopy.

I heartily concur with Dr. McCormack that repetitive bronchoscopic examinations are fruitless, but I do think that bronchoscopy should be repeated under fluoroscopic control or in fact done that way initially to try to obtain a diagnosis before the patient is taken to the operating room. I think a surgeon needs to know the bronchial anatomy for planning any resection prior to surgery. If I perform a bronchoscopic procedure that shows cancer and refer the patient to a surgeon, I try to define as accurately as possible the extent of abnormal bronchial anatomy. I feel I am qualified to describe this fairly accurately. Nevertheless, I would very much welcome the surgeon performing repeat-bronchoscopic examination at the time of the surgery if he feels it is necessary to have an actual personal view of the bronchial anatomy. I might add that this has seldom been done, in my experience.

I do not agree with Dr. McCormack that the thoracic surgeon is the only one or even the best one to carry out this diagnostic procedure.

William A. Byron, Jr., M.D.
Indianapolis

To the Editor:

Dr. McCormack's statement that "preoperative bronchoscopy must be done by the operating surgeon, thus avoiding needless repetition of endoscopies" deserves comment from pulmonary internists.

Physicians knowledgeable in lung cancer realize that initial staging of endoscopically visible lung cancer often reveals inoperability, thus eliminating the need for surgical consultation. Operable cases can be adequately described, thus eliminating the need for endoscopic repetition. In addition, I doubt that any physician would depend upon a frozen section of a bronchoscopic biopsy specimen for definitive diagnosis to determine operability, i.e., permanent section would have to be made available.

One can also compare both cost effectiveness and morbidity in bronchoscopy performed under local anesthesia with minimal assistance from auxiliary staff with bronchoscopy performed in an operating room, often with general anesthesia and assistance from operating room nurses and their supporting cast. Dr. McCormack and her references (all thoracic surgeons) may indeed have an inaccurate and self-interested viewpoint.

Bruce E. Sherling, M.D., F.C.C.P.
Mamaroneck, New York

In our Pathology Department, frozen section diagnosis is 95 percent reliable. It has been our experience, as stated in reference 3, that our bronchoscopic findings differ as much as 71 percent of the time from reported findings in patients referred. Our referral base is very broad and this may explain the discrepancy.

I have no objection to anyone doing transbronchial biopsy (and Dr. Byron and I know several of us surgeons who are trained in the art). I speak from an experience of receiving referrals too late to achieve the best results for the patients, and if I have cut down on lag time at all, it will be worth it.

In response to Dr. Share's comments, my recommendation for prompt therapy means within as short a time as possible, not beyond one month if possible. Again, the point as to who should perform the endoscopy must be made by the physician seeing the patient first. An obvious candidate for a surgical approach benefits from prompt referral, just as a patient coming to my office with interstitial problems is promptly referred to a pulmonologist.

Stage 3 lung cancers with N2 disease are always treated by us with combined surgery and irradiation. The best results, as published by Martini, have been unmatched by any other approach and the one patient in four or five who can have at least an additional five good years of living should be given the opportunity to opt for this choice of treatment.

Patricia McCormack, M.D.
New York City

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Patient's Wife Cures His Snoring

Editor's note: The following communication was submitted to Chest by one of our physician-readers. He received it from a patient. A member of the Editorial Board who reviewed the comments noted "the contents of this letter may well prove to be useful for family harmony!"

Dear Doctor:

In regard to my husband's sleep apnea-snorning problem, after we talked to you, I invented a method to prevent my husband from sleeping on his back. I sewed a pocket into the back of a T-shirt and inserted a hollow, lightweight plastic ball (about the size of a tennis ball). I fastened one side of the pocket with safety pins so that the ball can be removed to launder the shirt.

It's working beautifully. In about two days, I could see a vast improvement in his energy level, alertness, and interest in life. He no longer falls asleep while sitting straight up in a chair, and the quiet, snoreless nights are great!

I thought this information might be helpful to other patients with a similar problem.

Exercise-induced ST Segment Alternans

To the Editor:

We read with interest the report of Wayne, Bishop and Spodick (Ches 1983; 83:824) concerning exercise-induced ST segment alternans. We would like to comment upon and, hopefully, clarify several points. We are aware of at least four other similar reports. It is, in our opinion, a false assumption to infer that a finding occurs during exercise it cannot be due to coronary artery spasm. It is well described that Prinzmetal's angina can occur during exercise testing. A similar case which we reported underwent two additional
exercise tests on subsequent days in order to determine the reproducibility of electrical alternans of the elevated ST segment. On both repeat studies, neither ST segment elevation nor alternation occurred; rather, the patient experienced ST segment depression despite achievement of higher levels of exercise. He was subsequently found to have severe triple vessel coronary artery disease by angiography. The most likely explanation for ST segment elevation on the first test is transmural ischemia due to coronary spasm. Spasm is the only reasonable explanation for why such changes could occur on only one of three otherwise identical tests. We therefore suggest that all such patients should undergo repeat exercise testing done with proper precautions before it is concluded that spasm is not involved.\textsuperscript{11,14}

John J. Rozanski, M.D., Miami Beach, Florida; and Morris Kleinfeld, M.D., Brooklyn, New York

References


To the Editor:

Dr. Rozanski helpfully points out four cases similar to our case. Three of these reports are in journals to which we do not have regular access and the fourth, in Archives of Internal Medicine, buried the alternans among a great deal of material under the title "ECG manifestations of myocardial ischemia."

I am mystified by Dr. Rozanski's reference to "a false assumption... (that) it cannot be due to coronary artery spasm." We did not make this claim. The ensuing material from Dr. Rozanski's letter to the editor in PACE (one of the cases we were unaware of) is therefore not related to our report. Yet his analysis of those cases can only be agreed with.

David H. Spodick, M.D., F.C.C.P.
Professor of Medicine, University of Massachusetts Medical School, Worcester

Postthymectomy Pericardial Tamponade

To the Editor:

We read with interest the article by Wanner et al Chest (1983; 83:647-49). In that same month we were caring for a patient with a life-threatening complication directly related to postthymectomy pericarditis.

A 34-year-old dentist presented with a six-month history of diplopia, ptosis and exertional muscle fatigue. The diagnosis of myasthenia gravis was confirmed by EMG, positive Tensilon test, and elevated acetylcholine receptor antibody titer. A chest roentgenogram revealed left upper lobe granulomata and calcified left hilar node. CT scan of the chest demonstrated a 3.5 cm mass to the left of the main pulmonary artery. At surgery, the anterior mediastinum was dissected en masse and a well-encapsulated thymoma was present. Additional dissection was undertaken to remove extensive and heavily calcified tissue. This probably represented old granulomatus disease, but no granuloma or organism was identified with special stains. Results of routine TB and fungal cultures were negative.

Postoperatively, the patient had transient left recurrent laryngeal nerve dysfunction, but his myasthenia cleared over the next three months. Deep venous thromboses of the calves were documented by venography as an outpatient three weeks postoperatively; warfarin anticoagulation was begun. The protamine was maintained between 18 and 22 seconds (control 10 to 13 seconds). Shortly thereafter, the patient noted increasing dyspnea. Five weeks postoperation he noted left anterior pleuritic chest pain and greatly increased dyspnea on exertion.

His physical examination at that time was consistent with pericardial tamponade with a pulse rate of 120, jugular venous distension, 40 mm of pulsus paradoxus, and slight liver tenderness. Pericardio-centesis of 200 ml of bloody fluid resulted in prompt hemodynamic improvement. Cultures of the fluid for routine bacteria, TB and fungi were negative. The serum antinuclear antibody was negative and serum complement levels were normal. Warfarin was discontinued and 75 mg of triaminolone hexacetonide (Aristospan) was instilled into the pericardium, resulting in prompt improvement. The pericarditis recurred approximately two weeks later without tamponade and readily responded to therapy with indomethacin.

We present this case as a serious complication of postoperative pericarditis after thymectomy. If we had been aware of the frequency of pericarditis following thymectomy, perhaps conservative management without anticoagulation of this patient's calf vein thrombophlebitis could have been undertaken. At least we would have more carefully looked for pericardial effusion during the course of treatment. Physicians should be aware of the risks of anticoagulation after thymectomy because of the frequent occurrence of occult pericarditis as described by Wanner, et al.

John W. Meitek, M.D., and Terry K. Rosborough, M.D., Abbott Northwestern Hospital, Minneapolis

Humidification Hazard

To the Editor:

I wish to call attention to a potentially fatal user-induced malfunction of a Bird model 3000 heated humidifier (Bird Products Division/3M, St. Paul, MN). The Bird humidifier is a highly efficient, heated, in-circuit, pass-over humidifier. The water reservoir within the humidifier incorporates a water inflow system composed of a central vertical metallic tube which sits over a foam-filled plastic float, the superior surface of which is a rubber disc (Fig 1). As water drips through the metallic tube and into the reservoir, the float rises until its rubber disc contacts and occludes the open end of the metallic tube to halt further inflow of water. As water is vaporized from a tubular wick immersed in the water, the float falls and the reservoir fills again. A central spindle protrudes from the bottom of the reservoir to fit into a vertical cylindrical opening in the center of the bottom surface of the float. This spindle-in-cylinder arrangement is intended to maintain a functional relationship between the rubber seal on top of the float and the capillary tube protruding down into the evaporation chamber. The cylindrical pin also appears to have been designed to prevent incorrect placement of the float in the reservoir (eg, upside down or sideways).

This humidifier is used in our institution during anesthesia for long procedures. Recently, the device was placed in the inspiratory...