Communications to the Editor

Communications for this section will be published as space and priorities permit. The comments should not exceed 350 words in length, with a maximum of five references; one figure or table can be printed. Exceptions may occur under particular circumstances. Contributions may include comments on articles published in this periodical, or they may be reports of unique educational character. Specific permission to publish should be cited in a covering letter or appended as a postscript.

Home Care Ventilation

To the Editor:

The experience of Fischer and Prentice with home care ventilation is a welcome addition to the literature (Chest 1982, 82:739-43). Their data support the assumption that intermittent full respiratory support can improve quality of life and reduce morbidity in patients with certain restrictive and obstructive pulmonary disease. The authors' concern that possibilities for home care have been neglected in the literature is a bit ill-founded, as our review of the literature has disclosed ten reports addressing that very subject. Some reports are anecdotal but, nevertheless, all expound on the "feasibility" of home care. Of further importance is that there may be other reasons why the literature is replete with further emphasis on home care. This is borne out by the fact that conservative estimate there are in excess of 3,000 individuals in this country who receive some type of mechanical ventilation continuously or intermittently at home.

Fischer and Prentice report the obvious cost reduction and patient preference which is similar to our own experience which now has grown to 29 patients over the last five years. Perhaps beyond "feasibility" of the obvious is that the lack of emphasis in the literature may not be due to the inarticulateness of our colleagues, but rather the fear that what may seem unorthodox (home care ventilation) has become a necessity due to advanced technology and the ability to prolong life by mechanical support.

If, indeed, the necessity for home care becomes obvious, then the true issues of home care will not be the technical aspects of home care outlined in Fischer and Prentice's report. It will become the necessity for the third-party payers to recognize the importance of their support for home care ventilation, a concept which may not save health care moneys in the short term, but will over the long term. Finally, and perhaps of equal importance to the third-party recognition and perhaps beyond the technical aspects of home care, is the ability of clinicians to preserve the quality of life of those who assist the patient supported by home care ventilation. Spouses, children, relatives, and friends of the ventilator-dependent patient are vital to home care management. Our own experience is that home care truly hinges on a suitable domestic environment, a fact which the authors mention as only a footnote.

Edward D. Stiok, M.D., F.C.C.P.; Director, Medical Intensive Care Unit; W. Terry Gipson, M.D., Department of Psychiatry; and Kay Stelmak, R.N., ARRT, Department of Respiratory Therapy, Cleveland Clinic Foundation, Cleveland

Endobronchial Embolization of Metastatic Endobronchial Sarcoma

To the Editor:

A 22-year-old white woman with pelvic chondrosarcoma developed fever eight weeks after right hemipelvectomy. Chest roentgenograms demonstrated right lung collapse and multiple pulmonary nodules. The patient underwent fiberoptic bronchoscopy (Olympus BF-84) through an 8 mm endotracheal tube with supplemental oxygen. The right main stem bronchus was completely occluded by tumor at the level of the right upper lobe orifice. The left endobronchial tree was normal. Multiple pieces of necrotic tissue were withdrawn through the bronchoscope utilizing biopsy forceps. It was not possible to relieve the obstruction entirely. The bronchoscope and endotracheal tube were removed without difficulty. Within minutes, the patient became cyanotic with labored respirations and decreased breath sounds over the left chest. Marked

REFERENCES


D. A. Fischer, M.D., F.C.C.P.
Chief, Chest Medicine Service, Rancho Los Amigos Hospital, Downey, California
FIGURE 1. Tumor embolus removed from left mainstem bronchus. Hypoxemia developed despite oxygen supplementation and endotracheal intubation was required. She subsequently became hypotensive and required cardiopulmonary resuscitation. The clinical impression of left main stem occlusion was verified when a portable chest roentgenogram demonstrated obstruction of the left main stem bronchus. Fiberoptic bronchoscopy was performed during cardiopulmonary resuscitation in an attempt to clear the left main stem bronchus. A smooth white plug was noted just proximal to the left upper lobe orifice (Fig 1). The right main stem bronchus was no longer obstructed. Utilizing biopsy forceps, the tumor and bronchoscope were slowly withdrawn together through the endotracheal tube with subsequent re-expansion of the left lung and improvement in oxygenation. The patient stabilized and was subsequently successfully extubated. The tumor plug was histologically identical to the pelvic chondrosarcoma resected two months earlier.

In the evaluation of endobronchial obstruction from metastatic disease, bronchoscopy is often indicated to assess airway obstruction, to confirm malignancy, or to attempt to relieve the obstruction. This case, however, demonstrates the risk of large tumor embolization during bronchoscopy if the endobronchial lesion becomes dislodged. To our knowledge a similar complication resulting from an endobronchial metastatic lesion has not been described.

David A. Shenk, Major, USAF, MC; Terry L. Kilgore, Major, USAF, MC, FCCP; and James R. Cacott, Captain, USAF, MC, Lackland AFB, Texas

The opinions expressed are those of the authors and do not necessarily represent official USAF policy.

Reprint requests: Dr. Shenk, Wilford Hall USAF Medical Center, Lackland AFB, TX 78236

REFERENCES


Knotting of a Swan-Ganz Catheter

To the Editor:

We read with interest the letter by Drs. Iberti and Jayogopal (Chest 1983; 83:711). We recently had a similar knotting of a Swan-Ganz catheter in the pulmonary artery (Fig 1).

The catheter was inserted and withdrawn six times and each time did not show a good pulmonary artery or wedge tracing until after 60 cm. The patient was septic with a temperature of 41°C, pulse rate of 150 per minute, and blood pressure of 130/50 mm Hg. The surgeon believed the patient was about to suffer a perforated gall bladder. As there was a good pulmonary artery and wedge tracing, surgery was begun.

During the procedure, the balloon of the Swan-Ganz catheter was inflated. The tracing believed to be the CVP flattened. A check of the transducers revealed the pulmonary artery and CVP transducers had been reversed. During insertion, what was believed to be the CVP transducer, but was actually the PA tracing, was turned off and the proximal port was transduced. Postoperative x-ray film revealed a knot in the Swan-Ganz catheter.

The cardiac output determinations were also inconsistent and unbelievably high for an 81-year-old woman, despite her severe sepsis.

Attempts to remove the catheter in the SICU met with resistance to withdrawal. Therefore, the patient was taken to the cardiac catheterization laboratory. The catheter was gradually unknotted by the use of guide wires without complication. Our cardiologists have previously untied intracardiac, loosely knotted, Swan-Ganz catheters in a similar manner as described by Mond et al.1

In two patients with tightly knotted Swan-Ganz catheters one of us (FAP) cut down over the femoral vein and used a basket to retrieve the knotted catheter from the superior vena cava. The knotted catheter was removed from the femoral vein, easily controlling the blood loss. This technique avoided uncontrollable hemorrhage from laceration of the subclavian vein as the knotted catheter was withdrawn, as reported by Sabel and Bramwit.4

We believe the moral herein is: attention to details can make the difference between a sophisticated monitor and disaster.

Cuendolyn B. Graybar, M.D., F.C.C.P.; Elena Adler, M.D.; William Smith, M.D.; and Francis A. Peyau, Tulane Medical Center, New Orleans

Reprint requests: Dr. Graybar, 1430 Tulane Avenue, New Orleans 70112

REFERENCES

1 Mond HG, Clark DW, Nesbitt SJ, Schlant RC. A technique for unknotted an intracardiac flow directed balloon catheter. Chest 1975; 67:731-33