Communications for this section will be published as space and priorities permit. The comments should not exceed 500 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.

Bone Marrow Emboli in a Patient with Miliary Tuberculosis

To the Editor:

Bone marrow emboli to the lungs have most often been associated with blunt trauma to bones, multiple fractures, surgical procedures, and generalized seizures.1-7 On occasion, such emboli may be a contributory factor in death.4-8 This case report presents the findings in a patient with miliary tuberculosis, tuberculomas of the central nervous system, and nonfatal bone marrow embolus to the lung.

CASE REPORT

A 37-year-old black man was admitted on April 2, 1978, because of a generalized grand mal seizure. There was no significant medical history, except for a mild headache present over the past week. Physical examination revealed a well-nourished muscular man with postictal lethargy. Bilateral papilledema with acute hemorrhages and palsy of the sixth nerve were present.

The concentrations of alkaline phosphatase and γ-glutamyl transpeptidase were moderately elevated. A chest roentgenogram showed diffuse reticulonodular ("miliary") densities and marked cardiomegaly with a left ventricular contour. Computerized axial tomograms of the brain revealed multiple densities throughout the central nervous system. The results of lumbar puncture were within normal limits.

On the second day of hospitalization, the patient underwent a percutaneous biopsy of bone marrow from the right anterosuperior iliac crest, followed within 45 minutes by an open pulmonary biopsy. No resection of ribs was necessary. Microscopic examination of the pulmonary specimen revealed noncaseating and caseating granulomas, as well as acid-fast organisms. Bone marrow was discovered in a pulmonary artery.

Therapy with isoniazid, rifampin, and streptomycin was begun, and except for one episode of bradycardia and vomiting, the patient’s course of hospitalization was uneventful.

DISCUSSION

Bone marrow emboli to the lung have been noted on occasion, particularly in fatal cases of multiple fractures,1-2 from generalized seizures,4-8 and as emboli arising from sternal puncture.3 Bone marrow emboli also have been noted in multiple myeloma,4 surgical procedures involving sternal transection,4 and external cardiac massage.4 These are usually incidental findings during postmortem examination. At times, bone marrow emboli may be sufficiently large to cause respiratory distress, as well as death, with the emboli as the suspected proximate cause.4-5,8

In our patient, as well as in other reported cases, neither the significance nor the incidence of bone marrow emboli is known. Small emboli probably do not significantly alter the clinical course of the patient’s condition. These emboli are almost exclusively found in small and medium branches of the pulmonary arteries. Most often, these are found to be peripheral, and the particles of marrow have a tendency to disintegrate and disappear.

The importance of this finding is controversial.2 As mentioned, these emboli are usually postmortem findings, and the cause-and-effect relationship to the death of the patient is not known; however, in certain cases, it appears that a proximate cause of death from bone marrow embolism is suggested, and an increased awareness of this complication has been stressed.4-5,8

In our patient, either generalized seizures or the biopsy of bone marrow could have led to the finding of bone marrow emboli to the lung. There were no sequelae to this finding. This represents a unique case of miliary tuberculosis and bone marrow embolus to the lung that was diagnosed before death. This case is reported to draw further attention to this entity.

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REFERENCES


A New Device to Perform a Standardized Valsalva’s Maneuver

To the Editor:

Valsalva’s maneuver is an important tool at bedside.1-3 Although the maneuver is commonly performed by forced expiration against a closed glottis, many patients have difficulty in comprehending instructions on how to perform the maneuver or in actually executing it. I describe a simple adapter to perform a standardized Valsalva’s maneuver. It

208 COMMUNICATIONS TO THE EDITOR

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Aneurysms
sutureless
defects.

With al2 treating hospitals, To maneuver.4

Furthermore, the cost of the device is minimal.

**DESCRIPTION OF THE DEVICE**

The device consists of four parts (Fig 1). The disposable mouthpiece (Inspiron No. 001200) fits into one end of a 6-inch corrugated tube (Hudson Corr-A-Tube II, No. 1410). The other end of this tube is coupled to a connector (Bard-Parker oxygen hose connector No. 5002) via a 22 × 22-mm adapter (Bard-Parker No. 5095). This connector fits snugly onto the male hub of the rubber tubing of most commercially available sphygmomanometers. An 18-gauge needle may be inserted into the adapter to equalize the intraoral and intrabronchial pressures during the strain phase of Valsalva's maneuver.4 The patient in the supine or semirecumbent position blows into the mouthpiece and maintains the column of mercury in the sphygmomanometer at 40 mm for a period of ten seconds. This device is presently being studied in a series of patients.

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**REFERENCES**

4. Levin AB: A simple test of cardiac function based upon the heart rate changes induced by Valsalva maneuver. Am J Cardiol 18:90-99, 1966

**Sutureless Prosthesis for Aortic Aneurysms**

**To the Editor:**

In 1912, Alexis Carrel1 described a technique for permanent intubation of the thoracic aorta and suggested its use in treating thoracic aortic aneurysms. In 1952, Voorhees et al2 reported the use of Vinyon "N" cloth for bridging arterial defects. In several of their laboratory animals, Voorhees et al2 used a "nonsuture Vitallium cuff technique" described by Blakemore et al3 in 1942. Since that time, there has been little interest in a sutureless technique for inserting arterial prostheses. Recently, we developed a prosthesis consisting of Dacron cloth with two cloth-covered stainless steel spools at either end for use in the treatment of thoracic aneurysms (Fig 1).

We have now used this prosthesis in six patients, with no surgical deaths or complications. Follow-up x-ray films and arteriograms have shown no tendency for thrombosis or migration of the prosthesis.

The high surgical mortality in acute dissection of the aorta is primarily due to hemorrhage from attempts to suire friable edematous tissue. By utilizing a sutureless prosthesis, this complication is avoided. The prosthesis may be inserted with little difficulty and thus a short duration of cross-clamping of the aorta. We believe that this is a significant advance in the treatment of thoracic aneurysms, and we are preparing to submit a complete report on our work in the near future.

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**REFERENCES**


**Unilateral Diaphragmatic Paralysis in Association with Erb's Palsy**

**To the Editor:**

Erb's palsy is a well-described complication of trauma to the shoulder and neck.1 Except in neonates, it is very unusual for Erb's palsy to be accompanied by an ipsilateral diaphragmatic paralysis. The purpose of this communication is to...