

Selected Abstracts

FROM SURGERY GYNAECOLOGY AND OBSTETRICS

An Evaluation of the Double Contrast Barium Meal (DCBM) Against Endoscopy.
H. Herlinger, J.N. Glanville and L. Kreel.
Clin. Radiol., 1977, 28:307.

The Barium Meal was largely unassessed before the introduction of quality endoscopy. This study was prospective to compare the accuracy of double contrast barium meal against endoscopy. It involved 50 patients. Conventional barium meal was followed by endoscopy and within two weeks by double contrast barium meal. The same observer always performed the endoscopy and another the double contrast barium meal. All evidence was reviewed by the two observers. Diagnosis by endoscopy was regarded as conclusive unless contradicted by operation or overwhelming repeated barium meal evidence. In this way, the principle diagnosis was arrived at for each patient and agreement or lack of it determined between the two diagnostic techniques. To refine the system, a weighted score was introduced all lesions correct, 100 per cent, and a major lesion missed yielded a nil score. A lesion misinterpreted led to a deduction of 30 to 50 per cent, depending on significance. If a major abnormality was diagnosed and minor lesion missed, a deduction of 10 to 25 per cent occurred, depending upon its relevance. It is acceded that endoscopy is the more accurate modality. With it, histology and cytology can be obtained and color changes can be observed.

In spite of these features, the double contrast barium meal on adjusted average in this series reached an accuracy of 91.4 per cent prospectively and 96 per cent when carefully reviewed retrospectively. The use of both endoscopy and double contrast barium meal would appear necessary to supply a fully adequate gastric imaging service.

Thomas S. Reeve

Prosthetic Materials in the Repair of Large Ventral Hernias (Les matériaux de synthèse dans la cure des grandes éviscéérations abdominales; Bessignements à propos de 78 observations). C.H.

Meyer, D. Alexiou, H. Calderoli and L.F. Hollender. *Ann. Chir.*, 1977, 31:221.

Seventy-eight operations, including three reinterventions, had been carried out upon 75 patients for large incisional hernias. A prosthetic material, either metallic in 47 instances or Dacron, polyester fiber, mesh in 32 instances and other materials had been used in the repair of hernias with a width of more than 5 cm. A six month of five year follow-up study was possible in 72 per cent of these patients. A recurrence rate of 10 per cent was observed. Recurrent hernias and the ventral hernia treated with a prosthetic material in the first place, when reoperated upon and a prosthesis used, were all followed by excellent results.

The indications for prosthetic insertion should be widely extended to ventral hernias of average size and to those hernias which have already recurred. Metallic materials were preferred for their biophysical qualities and their good tolerance of infection. However, a Dacron prosthetics is recommended for large hernias in which it is necessary to replace part of the abdominal wall, since there is a certain risk of intestinal injury by the metallic fibers if used in such circumstances.

F. Wesner Fleurant

Inhalation of Foreign Bodies in Children; Report of 500 Cases. Aydin Aytac, Yurdakul Yurdakul, Coskun Ikizler and others.
J. Thorac. Cardiovasc. Surg., 1977, 74:145.

An experience with 500 children with suspected inhalation of foreign bodies is described. Four hundred and sixty-two foreign bodies were found. There was a positive history for aspiration present in 446 of these patients. Waiting for spontaneous expiration of a foreign body by postural drainage cannot be justified in modern practice, and bronchoscopic removal of the foreign body is the treatment of choice.

Aspiration of foreign bodies is common in children aged one to three years, especially boys. Some children with aspirated foreign bodies have no symptoms and no abnormalities on roentgenograms of the chest. A history of aspiration is an indication for bronchoscopic examination. Bronchoscopic removal of the foreign body requires close communication between the anesthesiologist and the endoscopist and should be carried out under general anesthesia with muscle relaxants.

Foreign bodies which cannot be grasped by endoscopic forceps or removed by other maneuvers, such as utilization of a Fogarty catheter, should be removed by thoracotomy or bronchotomy. Routine use of steroids, prednisone 1 to 2 mgm/kgm and nebulization just

after using the bronchoscope have resulted in a low incidence of post-traumatic respiratory distress and have reduced the incidence of tracheostomy in this series to 1.5 per cent. Long term presence of foreign bodies in the bronchus may lead to stenosis of the bronchus with the attendant symptoms of chronic cough, allergy and pulmonary infection, eventually requiring resection of lung parenchyma. Mortalities after bronchoscopic procedures were low in this area, 1.8 per cent.

Stevan J. Phillips

The Role of Transbronchial Lung Biopsy in Diffuse Pulmonary Disease. Claude W. Smith, Gordon F. Murray, Benson R. Wilcox and others. *Ann. Thorac. Surg.*, 1977, 24:54.

Forty consecutive patients underwent flexible fiberoptic transbronchial biopsy of the lung for diagnosis of diffuse nodular or infiltrative disease of the lung. Pathologic diagnosis was correctly established in 34 of 40 patients. Four patients had histologic findings of normal lung but were in a late stage of roentgenographic resolution which subsequently cleared. Inaccurate diagnosis was made in two patients, one with histiocytic lymphoma but only dense fibrosis on biopsy and the other with recurrent Hodgkin's disease who showed inflammation and atypical monocytes in biopsy. There were no major complications, no instances of pneumothorax and only minor bleeding in several patients who responded to conservative or expectant therapy.

The use of this safer and simpler technique, as opposed to open biopsy of the lung, whenever possible is recommended. The diagnosis of non-specific fibroinflammatory disease compares with the incidence of this diagnosis using open or standard bronchoscopic biopsies. Open biopsy of the lung is recommended should the clinical impression vary with the findings of transbronchial biopsy. This technique is useful for sarcoidosis and opportunistic infections as well. Close attention to details of technique and anticipation and rapid treatment of complications, namely, pneumothorax or bleeding should they occur, are stressed. Transbronchial biopsy has reduced the cost to the patient both monetarily and in terms of morbidity as compared with open biopsy of the lung.

Bruce Farrell

Trauma to the Esophagus; Clinical Study and Therapeutic Results in 83 patients (Less traumatismes de Poesophage: clinique et resultats therapeutiques; a propos de 83 cas). R. Giuli, B. Estenne, J. Colletas and J.L. Lortat-Jacob. *Ann. Chir.*, 1977, 31:193.

Eighty-three injuries to the esophagus of diverse etiology, including esophagoscopy, surgical accidents, esophageal dilation, external

trauma and foreign body ingestion, are reviewed. Of 22 lesions of the cervical esophagus, one of 11 patients with lesions sutured or drained or both within 48 hours of injury died, compared with four of 11 patients who died when treated more than 48 hours after injury.

Nine of 41 patients with thoracic lesions treated within 48 hours died, compared with three of five dying who received treatment after 48 hours. Of 20 abdominal esophageal injuries, two of 16 patients treated within 48 hours died, compared with three of four treated after 48 hours. Simple suture and drainage were performed when possible. In three high thoracic injuries to the esophagus above the aortic arch, simple cervical drainage sufficed.

Bipolar esophageal exclusion done for late lesions in seven instances resulted in two deaths. Two of four patients treated by esophagectomy died. For low perforations, the Thal procedure yielded good results.

When viewed as a whole, the mortality for patients treated within 12 hours, 19 per cent, was similar to that for patients treated between 12 and 48 hours. For lesions older than 48 hours, the mortality was 50 per cent.

Alan T. Marty