

Selected Abstracts

SELECTED ABSTRACT FROM SURGERY GYNECOLOGY AND OBSTETRICS

Breast Cancer in Families. David E. Anderson. *Cancer*, 1977, Suppl., 40:1855.

Results of previous studies have indicated that patients with a family history of cancer of the breast are generally younger and have a higher frequency of bilaterality than patients with no family history. These attributes were subsequently found to have genetic significance, since the risks of development of cancer of the breast in first degree relative of patients were significantly increased when the patient had premenopausal onset and bilateral disease. Early onset and bilaterality were more characteristic of high than low risk pedigrees. The high risk pedigrees were those in which the mothers of patients also had cancer of the breast, and the sisters of patients had a 30 to 35 per cent lifetime probability of having the disease.

This present study is based on 489 pedigrees and 983 daughters at risk. Information on bilaterality and age at diagnosis was available for 539 familial patients diagnosed at one hospital and 348 who were diagnosed elsewhere. Control data were taken from a series of 5,100 patients who were admitted with a microscopic diagnosis of cancer of the breast. Another source of control was comprised of 217 patients admitted during the same interval as the familial patients with cancer of the breast. The control group of patients had verified family histories of neoplasms other than those of the breast.

This analysis was conducted to determine the age at diagnosis and bilaterality rate in 887 patients with different familial patterns of the disease compared with 5,100 unselected patients and to estimate the lifetime probabilities of development of cancer of the breast in 983 daughters of familial patients. The familial patients had higher rates of bilaterality and were younger at diagnosis than patients in an unselected series. Bilaterality rates were highest in young patients. Familial bilateral patients had their first primaries about five years earlier than patients with unilateral diseases. Daughters of patients with any type of family history of cancer of the breast exhibited a 23 per cent lifetime probability for the disease. The highest probability, 27 per cent, pertained to daughters of patients whose mothers were also affected. It was concluded that this group referred to a hereditary type of cancer of the breast distinct from types involving associated neoplasms. The occurrence of multiple neoplasms characterizes the hereditary types of cancer of the breast.

Donald M. Clough

Role of Aspiration Breast Biopsy. J.E. Devitt and R.H. Curry. *Can. J. Surg.*, 1977, 20:450.

The results of 100 consecutive aspiration biopsies of non-cystic lesions of the breast were reviewed. Aspiration biopsies were obtained using a 20 gauge needle and a 10 ml syringe. Specimens were prepared using a single millipore filter, which was fixed in 80 cent ethanol and stained by the Papanicolaou technique.

Twenty-two of the 33 instances of documented cancer of the breast were detected by aspiration biopsy. There was one false-positive diagnosis. Cancer was detected by this technique in three patients who were not thought to have cancer on clinical examination.

Aspiration biopsy of the breast is a useful but imperfect diagnostic aid. Tissue biopsy should be performed when the cytologic diagnosis is normal, but clinical findings suggest cancer.

Clayton H. Shatney

Thoracoscopy in the Diagnosis of Pleural Effusion. A. Canto, E. Blasco, M. Casillas and others. *Thorax*, 1977, 32:550.

Thoracoscopy for diagnosis and therapy is described in 208 procedures. Therapeutically, two patients had foreign bodies extracted and two had pleurodesis for recurrent pneumothorax. One hundred and seventy-two patients underwent thoracoscopy for diagnosis of a pleural effusion. Thirty-two patients underwent thoracoscopy for histologic diagnosis of a pulmonary shadow. Both general and local anesthesia were used. The typical findings of malignant and inflammatory lesions are described. From 137 malignant tumors of the pleura, 129 abnormal thoracoscopic biopsy specimens were obtained, 94 per cent.

In nonmalignant conditions, histologic study of the biopsy specimen was useful in confirming a benign cause but was not helpful in clarifying the cause of the pleural effusion except in patients with pleural tuberculosis. Three complications are described; there were no deaths. In one patient tumor infiltrated the thoracoscopic scar. Thoracoscopy was felt to be contraindicated when thick adhesions were present. A free pleural cavity was essential.

Michael S. McArthur