

Selected Abstracts

FROM SURGERY, OBSTETRICS GYNAECOLOGY

Prophylactic Systemic Antibiotics in Colorectal Surgery. R.S. Feathers, A.A.M. Lewis, G.R. Sagor and others. *Lancet*, 1977, 2:4.

A prospective, randomized clinical trial of systemic antibiotic prophylaxis was carried out in patients undergoing colorectal operations with combinations of gentamicin with lincomycin and gentamicin with metronidazole. Fifty-two consecutive patients were included in the study, and mechanical intestinal preparation was used in all. The doses of gentamicin was 1.6 mgm/kgm given every eight hours intramuscularly or intravenously initially and then adjusted according to serum concentration. The dosage of lincomycin is not mentioned.

Sepsis was defined as infection of the wound, localized intra-abdominal abscess, or systemic infection. The antibiotics were started with the preoperative medication and continued for five days. The control group receiving no antibiotics had a sepsis rate of 48 per cent with one death attributable to the sepsis. In the treated group, the sepsis rate was 4 per cent. Although there were no infections in the gentamicin lincomycin group, two of 14 patients had pseudomembranous colitis develop, one died of this complication. The combination of gentamicin and metronidazole is effective and safe in prophylaxis of infection in colorectal operations.

C. Andrew Heiskell

Thyroid Malignant Tumors Before and After Introduction of Iodine Prophylaxis (Schilddrüsenmalignome vor und nach Einführung der Jodsalzprophylaxe). R. Bubenhofer and Chr. Hedinger. *Schweiz. Med. Wochenschr.*, 1977, 107:733.

A statistical survey involving 94,125 biopsies performed before 1925 and 1941 is presented. Malignant tumors were found in 268 patients, 115 men, 146 women and seven whose sex was not stated. One hundred and twelve, 41.8 per cent, of these had follicular carcinoma; 99,36.9 per cent had anaplastic carcinoma, and the rest had papillary carcinoma, lymphoma and other types of malignant tumors. These results were compared with those obtained by studying the period from 1962 to 1973. In this period, 327 tumors were found. One hundred and nine, 33.4 per cent, were papillary carcinomas; 97,29.7 per cent, were follicular carcinomas, and 43,13.1 per cent, were other types.

Beaty Gorisnic

Changing Concepts in Establishing the Diagnosis of Breast Masses. Michael R.

Coates, Yosef H. Pilch and John R. Benfield. *Am. J. Surg.*, 1977, 134:77

Experience with 294 biopsies of the breast using local anesthesia is reported. Sixty-two lesions proved to be carcinoma, while 235 proved to be benign. The correct preoperative clinical diagnosis was made in 91 per cent of the patients. Patients believed clinically to have carcinoma underwent needle biopsy, while those with lesions considered to be benign underwent excisional biopsy.

Diagnosis using needle biopsy technique left sufficient tumor to do estrogen-binding studies, decreased cost to the patient and helped the patient to be informed with certainty of the nature of the definitive operative procedure. A normal needle biopsy had no clinical significance and necessitated excisional biopsy.

Lawrence Hollander

Histologic Results of Lesions of the Breast After Attempted Aspiration (Histologische Ergebnisse exzisionsbedürftiger Prozesse in punktierten Mammæ). E.M. Paterok, W.D. Rummei and J. Weishaar. *Dtsch. Med. Wochenschr.*, 1977, 102:960.

A total of 614 aspirations of the breast were performed. In 430 instances, aspiration was the definitive treatment. The remaining 184 patients are discussed.

All cysts aspirated had air injections with pneumocystograms performed. Eleven cysts were roentgenologically suspicious after air injection. One proved to be an undifferentiated duct cell carcinoma. Twelve cysts showed suspicious areas outside their margins. Four of these proved to be lobular carcinoma in situ. There were 161 excisions done because no fluid was obtained on aspiration. The breakdown of these 161 showed five carcinomas of the breast, and five metastatic lesions from known primary carcinomas. Furthermore, there were 17 with proliferating papillomatosis, two of which revealed adjacent lobular carcinoma in situ. There were 85 fibroadenomas in this group of 161 biopsies.

Walter Matern

The Early Results of Treatment of the Obese by a Diet Regimen Enforced by Maxillomandibular Fixation. G.D. Wood. *J. Oral Surg.*, 1977, 35:461.

The effects of six months of maxillomandibular fixation upon obesity were studied in 19 carefully selected patients. Only patients without significant dental or periodontal disease who were instructed on appropriate dental care and who were accepting the program were accepted into the study. Ten of the 19 patients were unable to complete the six month period of fixation; five of these had demanded that the splints be removed within 24 hours because their craving for food was greater than

their wish to lose weight. All seven women and two men who completed the study lost a considerable amount of weight. Before treatment the mean weight of this group was 113 per cent over the ideal calculated weight, and after the six months of treatment, the mean weight was reduced to 70 per cent over the ideal calculated weight.

The fixation appliances were removed at the end of the first four weeks and reapplied after a minimum of three days. At the beginning of each month, maxillomandibular fixation was released and was not re-applied for gradually increasing periods until the patient was not wearing fixation between monthly visits. There was a significant decrease in the maximum opening of the mouth between the time treatment was started and each monthly re-application during the first three months of treatment. There was no significant difference between the maximal opening of the mouth between removal before and after treatment. During the first three months, the maximum opening of the month between removal and re-application of fixation in each month significantly increased. Regular removal of the fixation device was believed to be an integral part of the treatment. With the exception of one tooth requiring a small buccal restoration, no dental caries developed during this study. When the fixation splints were removed, all gingivae were inflamed and bled spontaneously on probing. A week later, after prophylaxis, there was believed to be no permanent detrimental effect of the fixation appliances on the periodontal tissues.

It was concluded that the method described is simpler than surgical procedures and effective in the short term in a small percentage of obese patients. No long term results were given and these can only await further investigation.

Lee A. Harker