

most important, its immunological characteristics, which are undoubtedly most unusual. Only then shall we be able to carry out controlled trials of the efficacy of various forms of treatment. Until such a time the clinician will judge what is best for each individual; among his weapons should be regional perfusion, which as Weaver *et al.* have shown is of undoubted if numerically limited value. At this time we must try to ensure that all those who can benefit from it—or from other special techniques such as endolymphatic perfusion¹⁰ or non-specific immune enhancement—reach appropriate centres. There the centralization of experience will permit classification, study, and (let us hope) the emergence of a feel for therapy, all of which are essential if poorly defined preliminaries to clinical trials, and all of which stand to benefit those who are afflicted with an ill-understood but killing disease.

- ¹ *Clinical Oncology*, published by the Academic Press for the British Association of Surgical Oncology.
- ² Weaver, P. C., *et al.*, *Clinical Oncology*, 1975, 1, 45.
- ³ Edwards, J. M., in *Proceedings of International Cancer Conference*. Sydney, International Union against Cancer and Australian Cancer Society, 1972.
- ⁴ Fontaine, C., and Jamieson, C. W., *Proceedings of the Royal Society of Medicine*, 1974, 67, 99.
- ⁵ Ryan, R. F., Krementz, E. T., and Carter, R. D., in *Proceedings of International Cancer Conference*. Sydney, International Union against Cancer and Australian Cancer Society, 1972, 461.
- ⁶ Rochlin, D. B., Wagner, D. E., and Rochlin, S., in *Proceedings of International Cancer Conference*. Sydney, International Union against Cancer and Australian Cancer Society, 1972, 444.
- ⁷ Cox, K. R., *Australian and New Zealand Journal of Surgery*, 1975, 45, 32.
- ⁸ Creech, O., *et al.*, *Annals of Surgery*, 1958, 148, 616.
- ⁹ Davies, N. C., *Proceedings of International Cancer Conference*. Sydney, International Union against Cancer and Australian Cancer Society, 1972, 407.
- ¹⁰ Edwards, J. M., *Proceedings of the Royal Society of Medicine*, 1974, 67, 97.

Pancreatic Biopsy

A major problem facing the surgeon who operates on the pancreas is confirmation of the presence of a carcinoma. So often a malignant lesion in the head of the pancreas is small and difficult to differentiate from the surrounding chronic pancreatitis resulting from obstruction of the duct. On the other hand, the chronic inflammatory reaction surrounding a gland can mimic malignant infiltration. For this reason, despite the poor results of surgery for carcinoma of the pancreas, it is important to be able to distinguish malignant disease from chronic pancreatitis. In operable cases pancreatic resection for carcinoma gives some good results, though mortality and morbidity rates are still high. Most surgeons would agree with Smith and Sherlock¹ that resectable tumours should be resected, for the most pressing symptom may well be pain rather than jaundice. Palliative bypass procedures between the biliary and gastrointestinal tracts, often with gastrojejunostomy, bring relief to patients with unresectable carcinoma but are less appropriate in chronic pancreatitis, where gall-stone surgery, sphincteroplasty, or even subtotal pancreatectomy preserving the duodenum is to be preferred.

Various preoperative investigations have been developed in recent years in an attempt to solve this dilemma, including pancreatic scanning, selective angiography, duodenal cytology, endoscopic retrograde cholangiopancreatography, and biochemical tests of function. Nundy *et al.* have recently described a simultaneous combined pancreatic test.² None of these has yet provided a reliable answer for the surgeon. Trapnell³ suggested pancreatography on the operating table as an aid

to the operative diagnosis of carcinoma of the pancreas. The best guide to malignant disease of the head of pancreas is still the presence of deep progressive and persistent obstructive aundice with a very dilated gall bladder and common bile duct at operation.

Interest in pancreatic biopsy has been reawakened by the description by Kline and Neal⁴ of thin-needle biopsy of the pancreas as a safe and accurate procedure with immediate diagnosis at laparotomy. A Papanicolaou stain is done, when tumour cell clusters may be identified and distinguished from normal pancreatic cells. Eighteen of the 28 lesions examined were malignant, and 16 of these were diagnosed unequivocally by cytological examination. This technique has also been used with similar success in Scandinavia.⁵⁻⁷

In Britain Webb⁸ described a similar technique, but it has not found favour in relation to the pancreas. Most British surgeons have avoided biopsy of the pancreas in view of the hazards of haemorrhage and fistula and the difficulty in obtaining representative material from a small primary carcinoma. Perhaps it is timely to reconsider the feasibility of confirming the diagnosis of pancreatic carcinoma at operation. Currently George *et al.*⁹ have revived interest in the conventional type of operative pancreatic biopsy performed with scrupulous care. The fine-needle biopsy technique needs the services of a practised and expert pathologist, but it should be within the compass of most general surgical units treating pancreatic disorders. An alternative method is to use the biopsy needle described by Franzen *et al.*¹⁰ and now marketed in disposable form. Its use was first described for prostatic biopsy by Hendry and Williams,¹¹ but it can be applied to many other organs such as the pancreas and needs only conventional histological interpretation with frozen sections for immediate results.

- ¹ Smith, R., and Sherlock, S., *Surgery of the Gall Bladder and Bile Ducts*. London, Butterworth, 1964, p. 298.
- ² Nundy, S., *et al.*, *British Medical Journal*, 1974, 1, 87.
- ³ Trapnell, J., *British Journal of Surgery*, 1971, 58, 849.
- ⁴ Kline, T. S., and Neal, H. S., *American Journal of Clinical Pathology*, 1975, 63, 16.
- ⁵ Christoffersen, P., and Poll, P., *Acta Pathologica et Microbiologica Scandinavica*, 1970, suppl. 212, 28.
- ⁶ Arnesjö, B., Stormby, N., and Åkerman, M., *Acta Chirurgica Scandinavica*, 1972, 138, 363.
- ⁷ Forsgren, L., and Orell, S., *Surgery*, 1973, 73, 38.
- ⁸ Webb, A. J., *British Journal of Surgery*, 1970, 57, 259.
- ⁹ George, P., Brown, C., and Gilchrist, J., *British Journal of Surgery*, 1975, 62, 280.
- ¹⁰ Franzén, S., Giertz, G., and Zajicek, J., *British Journal of Urology*, 1960, 32, 193.
- ¹¹ Hendry, W. F., and Williams, J. P., *British Medical Journal*, 1971, 4, 595.

Safer Cigarettes

Preventable smoking-related disease and consequent shortening of life continue unabated in Britain, where the number of deaths due to smoking are estimated at between 50 000 and 100 000 per year. What is to be done? After 20 years of health education, treatment at clinics, and antismoking propaganda there has been little sustained decline in either cigarette sales or the number of people who smoke.¹ No doubt this is because cigarette smoking is so addictive. However, until recently most health education programmes have been aimed at the impossible goal of stopping smoking rather than adopting the more realistic approach of encouraging safer smoking.²