ADENOCARCINOMA OF THE HEAD OF THE PANCREAS

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Included in the current issue of the Canadian Journal of Surgery (pages 271 to 283) is the text of Dr. Bryce Taylor’s 1995 Roussel Lecture presented to the annual meeting of the Southern Ontario Surgical Society. Dr. Taylor tackles a most troublesome issue in general surgical oncology—the management of adenocarcinoma of the head of the pancreas.

The author is to be congratulated on presenting his material in such a readable format. This lecture is required reading for all general surgeons who are called upon to manage patients with extrahepatic biliary obstruction. Dr. Taylor presents objective data gleaned from a large number of sources, which are included in the extensive bibliography of his paper. He first reviews the daunting statistics relating to the incidence and death rate of this most malignant of all intra-abdominal cancers. The overall survival from all cases of this disease is best reflected in the death-to-case ratio reported annually by Statistics Canada. This figure remains close to one, that is, for every newly diagnosed case of cancer of the pancreas, almost the same number of patients die of the disease in any given year. This suggests, of course, that we are not having a significant effect on the natural history of this disease with any of our current strategies. The perception that surgical intervention can improve the lot of these patients in a palliative sense, therefore, is the crux of the issue relating to the appropriateness of surgery in this disease.

Dr. Taylor presents objective data to answer the question, Is the operation worse than the disease? There is no doubt that the safety of the Whipple procedure, particularly in specialized hands, can be exceedingly high. The issue, however, is whether the performance of a Whipple resection as a palliative manoeuvre outstrips the currently available alternative methods for dealing with obstructive jaundice. Unfortunately there has been no controlled clinical trial designed to answer this question.

Horton recently reviewed the use of controlled clinical trials in nine current surgical journals. Twelve articles out of 175 reviewed (7%) reported data from randomized trials. He concludes his editorial comment with a quote from a medical statistician in 1923: “...should like to shame surgeons out of the comic opera performances which they suppose are statistics of operations.” Carcinoma of the head of the pancreas surely must qualify as a subject for a nationwide clinical trial, though perhaps this is an impossibility! Attempts at wider excision, including peripancreatic structures, defined as regional resections have not apparently made significant inroads in the management of cancer of the pancreas. This is not surprising in view of the rich lymphatic and vascular nature of the primary tumour site, which allows for widespread micrometastases to occur early in the course of the disease in most patients. The obvious need for good adjuvant chemotherapy still exists and remains a major challenge for oncologists the world over.

Attempts at a more definitive evaluation of operability continue to be hampered by the fact that the tumour itself is not well visualized by our current imaging techniques. We are constantly amazed at the large size of tumours that we find at laparotomy in the absence of any clear-cut evidence of a mass on computed tomography and magnetic resonance imaging. Perhaps some form of dynamic scanning will ultimately improve our ability to select patients whose tumour is at a stage where resection is a realistic option for cure. Certainly the development of intraoperative ultrasound techniques have, in some hands, allowed for more conservative approaches to the patient with carcinoma of the pancreas. However, this technique, too, is highly operator-dependent.

The question of preoperative biliary-tract decompression remains largely unanswered. Dr. Taylor notes that a considerable number of patients seen by the surgeon already have a stent placed either radiologically or at endoscopic retrograde cholangiopancreatography by a well-meaning “interventionist.” The algorithm for the management of patients with obstructive jaundice is continuing to develop and requires a team approach to avoid contamination of the biliary tree preoperatively in patients whose tumours are truly operable.

The approach to preoperative...
stenting is undoubtedly affected by the enthusiasm, or lack thereof, of surgeons in the community to perform Whipple resections in this disease. If the residing philosophy is one of conservation (as is my current approach), the tendency for “preoperative” stenting will be more enthusiastic than in a centre where the surgical approach to palliation in this disease is more the rule than the exception.

Clearly, the surgical approach to these patients is also significantly coloured by the availability in the community of skilled interventionalists, both radiologic and endoscopic. In my centre we are blessed with a competent team of radiologists who are prepared to perform fine-needle aspiration biopsy followed by percutaneous placement of an expandable metal stent, which remains internally fixed and, in most cases, provides excellent palliation for these unfortunate patients. If this management strategy is not available to the average general surgeon (as I suspect it is not), a more surgical approach to the disease is obviously mandatory.

Regardless of one’s philosophy, it is essential that we as general surgeons identify individuals within our ranks who have the interests and skills required to accept these patients in referral from those of us with less experience and enthusiasm for surgery in this disease. The “designated hitter” for carcinoma of the head of the pancreas is an absolute must in our current surgical environment.

Dr. Taylor is to be congratulated on tackling a serious surgical subject with considerable objectivity, and his sections on the ideal surgical palliation, the issue of curability and the future prospects in this disease require careful reading by all general surgeons rendering opinions in patients with putative malignant disease in the pancreatic head.

It remains for each of us to develop a philosophy of management for carcinoma of the head of the pancreas that keeps morbidity at the lowest possible level, that takes account of issues relating to quality of life in these patients and that dedicates itself to the improvement of the techniques to prevent, evaluate and ultimately cure this highly lethal tumour.

Reference

1. Horton R: Surgical research or comic opera: questions, but few answers [comment]. Lancet 1996; 347: 984–985

ACETABULAR FRACTURES AND SEAT BELTS

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The article by Al-Qahtani and O’Connor in this issue of the Canadian Journal of Surgery (pages 317 to 320) raises important issues regarding the incidence and severity of acetabular fractures seen in a regional trauma centre. These authors present convincing evidence that the incidence of such injuries is significantly diminished by the use of seat belts. In addition, they point out that associated injury in these same patients is reduced both in incidence and severity. This is important for the surgical community in Canada since it influences current practice and encourages us to continue to promote safe driving practices, including the use of seatbelt restraint.

The high incidence of significant associated injuries in patients with acetabular fractures should suggest to the practising surgeon that acetabular fractures sustained in motor vehicle accidents are rarely isolated injuries, and significant associated injury should be carefully sought in such patients. The corollary is also true — patients with multiple injuries suffered in motor vehicle accidents should be carefully examined for pelvic and acetabular injury.

The overwhelming evidence that the use of seat belts diminishes the incidence and severity of both acetabular fractures and other injuries must be vigorously promoted by the surgical community to the public.

It is anticipated that the incidence of pelvic and acetabular fractures will further diminish with the implementation of side-impact protection as a routine feature in imported and North American cars in the years to come.

The authors are to be congratulated for a careful study of a frequently overlooked problem and encouraged to continue their ongoing analysis of this injury pattern.

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