Though efforts to produce uniformity of definition in clinical science are commendable, they are seldom achieved because of constantly changing understanding of illnesses and treatments. The best safeguard against misleading readers is to include definitions of terms. We clearly defined chest physiotherapy to mean "postural drainage with vibration and cupping in Trendelenburg, reverse Trendelenburg, and right and left lateral decubitus positions." These therapeutic methods are used widely to prevent postoperative atelectasis in children after cardiac surgery. Our study clearly showed that these maneuvers did not prevent atelectasis; indeed, they were associated with significantly more frequent and more severe atelectasis. Our results were unambiguous and meaningful for surgeons treating patients in the circumstances we described.

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December 8, 1982

Dear Editor:

In the December 1982 issue of Annals of Surgery, Drs. Robey, Mullen, and Schwab summarize their recent experience with "Blunt Transection of the Pancreas Treated by Distal Pancreatectomy, Splenic Salvage, and Hyperalimentation." Although we firmly support their enthusiasm for preservation of splenic tissue and resection of the amputated distal pancreas, we take exception with their recommendation for hyperalimentation by central vein.

Adequate postoperative nutrition is clearly important for the successful management of major pancreatic injuries. Protracted gastric ileus and frequent pancreatic complications preclude oral alimentation in many of these patients. Enteral feeding by jejunostomy, however, is a viable alternative to total parenteral nutrition (TPN). Our experience confirms that an elemental diet administered via a needle catheter jejunostomy is both safe and effective in the face of pancreatic trauma. Although enteral feeding and TPN are not mutually exclusive forms of nutritional support, the jejunostomy route has several distinct advantages. The cost of using the small bowel route is less than one eighth that of the central venous avenue. Metabolic and septic complications are far less with enteral feeding. Clearly, this technique is more convenient for the patients, nurses, and pharmacy. Perhaps the most compelling reason for using the gut is data from studies performed by the San Francisco General surgeons, indicating the superiority of nutrition administered via the G.I. tract versus central vein in preventing septic death.

In summary, although we concur with the authors in recommending "hyperalimentation" as an integral part of the management of major pancreatic injuries, we strongly recommend the jejunal route.

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References


January 14, 1983

Dear Editor:

Thank you for the opportunity to respond to Dr. Moore concerning the mode of nutritional support used in the patients undergoing distal pancreatectomy with splenic salvage after sustaining a blunt transection of the pancreas.

We are very aware of his work in the field of enteral nutrition via needle catheter jejunostomy in the abdominally injured patient. The cases reported in our article all took place before 1980. Since that time, enteral nutrition has been our primary mode of nutritional support. Based on some of the work that Dr. Moore has sighted in his letter as well as our own impression, we have used needle catheter jejunostomy in all cases of trauma that required laparotomy. We have had excellent results with this and have now managed well over a 100 patients with both blunt and penetrating injuries to the abdomen, using enteral nutrition as the primary nutrition support. There are many advantages to this, but in our unit, the greatest single advantage seems to be in avoiding the complication of catheter-related sepsis that these immune altered patients are so prone to.

We would differ slightly from Dr. Moore's approach in that we do not use solely an elemental diet, but rather in the non-pancreatic cases, have used a whole protein and fat commercially available tube feeding. We find that most of our patients accept this very well and have a very low incidence of diarrhea or bloating.

Since 1981, we have added an additional four cases of pancreatic transection—three blunt transections and the fourth case in which the pancreas was transected with a 38-caliber gunshot wound. All of these cases were managed with an elemental diet using a needle catheter jejunostomy. In addition, we have seen, two cases of pancreatic fistulas requiring reoperation and have inserted a needle catheter jejunostomy. Sole nutritional support, thereafter, was provided for these patients using an elemental diet. Interestingly, when the pancreatic fistulas seem to have closed, the elemental diet was changed to a tube feeding containing whole protein and fats. Both fistulas recurred. The recurrence is best explained by the stimulatory effect of small bowel protein and fat on the pancreas. We would recommend from this experience that all pancreatic injuries be managed using an elemental diet to avoid the pancreatic exocrine stimulation. Other abdominal injuries can best be managed using the needle catheter jejunostomy and full tube feedings which are markedly less expensive.

In summary, I concur with Dr. Moore that enteral nutrition is now the prime means of nutritional support for the abdominal trauma victim and that an elemental diet is an excellent means to provide the patient with an injured pancreas the adequate calories and protein that he needs and not stimulate the exocrine pancreas. In all other cases, however, we feel that it is much cheaper and as effective to use a whole protein and fat commercial tube feeding.