

# Robotic pancreatectomy: the contemporary experience

Pancreatic cancer is predicted to become the second leading cause of cancer-related death in the United States by 2030. Lack of screening and early detection, coupled with the propensity for early metastasis and minimally effective systemic therapy, remain significant barriers to curing patients with pancreatic cancer. Only a minority of patients presents with a tumor suitable for oncological resection, the best chance for long-term survival. However, even after curative-intent surgery, most patients will develop disease recurrence resulting in the 5-year survival of only 18%. There has been a consistent effort to reduce perioperative mortality and morbidity associated with pancreatic surgery. This is especially important for patients with pancreatic cancer who need to recover from the surgery and receive adjuvant chemotherapy. Over the last decade, robotic pancreatic surgery has been developed and allows for the completion of pancreatectomy and subsequent reconstructions through several tiny incisions as opposed to laparotomy. Robotic pancreatectomy has been demonstrated to be safe and is associated with fewer complications, shorter length of stay in the hospital, and faster return to normal function than traditional laparotomy. However, the majority of pancreatic resections in the US are performed in a conventional open manner despite studies showing robotic approach to be equally safe to an open procedure. This low utilization is undoubtedly multifactorial and may be primarily related to the complexity of the pancreatic resection and the absence of an adequate number of structured robotic training programs throughout the country. Common contraindications for robotic pancreatectomy include difficult access to abdominal cavity due to severe intraabdominal adhesions from previous surgeries or peripancreatic inflammation, intolerance of pneumoperitoneum due to cardiopulmonary dysfunction, difficult anatomy due to the involvement of major vessels around the pancreas, and poor robotic skills.

In this particular issue of *Annals of Pancreatic Cancer (APC)*, I have invited an international expert panel of pancreatic surgeons to outline current challenges of pancreatic cancer treatment and discuss every aspect of robotic pancreatic surgery and the related educational research.

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