special symposium: neuroendocrine tumours: the cutting edge and a glimpse into the future

DO MINIMAL ACCESS AND ROBOTIC SURGERY BRING BENEFIT TO NEUROENDOCRINE TUMOURS?

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Minimally invasive surgery has become a well-accepted modality in the management of neuroendocrine tumors (NETs). Laparoscopic approach is the treatment of choice for colorectal NET and it represents a crucial tool for establishing the localization of a lesion after noninvasive studies failed to identify the site of the neoplasm. On the other hand, there is no general consensus regarding the indications for and limitations of laparoscopic surgery for pancreatic NETs. Several studies demonstrated that laparoscopic distal pancreatic resection for NET is safe and feasible providing long-term results comparable with those achieved in open surgery. The main advantage of minimally invasive approach is to reduce the length of hospital stay and to lower significantly blood loss. Several experiences have also reported a significant decrease in the overall complication rate. Laparoscopic pancreaticoduodenectomy is not widely performed due to the associated technical difficulties. However, many studies have shown the effectiveness and safety of this procedure, when performed by expert laparoscopic surgeons. Robotic surgery can overcome the technical difficulties of traditional laparoscopic surgery by restoring three-dimensional vision, enhancing surgeon dexterity and eliminating tremor. Although the role of lymphadenectomy in pancreatic NET has not well established, a robot assisted distal pancreatic resection seems to be associated with a higher median number of resected lymph nodes. Nevertheless, a robotic approach is still limited to highly selected patients and there are many concerns regarding cost-effectiveness of these operations. Conclusions: Laparoscopic surgery is a valid option for NETs. This technique has been widely demonstrated to be safe and feasible with all the advantages of a minimally invasive approach in terms of pain, cosmetic results, length of stay and overall complications. These promising results have to be confirmed by future prospective randomized trials.

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