Surgical Treatment of Pancreatic Head Cancer and Perioperative Management in High Thromboembolic Risk Patients With Recent Drug-Eluting Coronary Stent Implantation

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ABSTRACT

Patients with multiple coronary artery diseases, especially with recent implantation of a drug-eluting coronary stent (DES), require strong dual antiplatelet therapy and regarded as those with very high thromboembolic risks. When these patients undergo major abdominal surgery for malignancy, perioperative risks including bleeding and thromboembolic risks have to be balanced against oncological radicality. We performed successful management of 81-year-old man suffering locally advanced pancreatic head cancer detected just after recent DES implantation. Curative-intent pancreaticoduodenectomy under preoperative continuation of aspirin monotherapy was considered to be the most preferred strategy to avoid critical coronary stent thrombosis. After informing benefits and risks of the scheduled therapy, the patient agreed with the strategy. Preoperative antithrombotic management consisted of discontinuation of clopidogrel for 7 days prior to surgery and continued aspirin monotherapy until surgery. During the operation, meticulous dissection and hemostasis were performed using coagulating shears and monopolar dissecting sealers due to possible antiplatelet-induced bleeding tendency. Subtotal stomach-preserving pancreaticoduodenectomy with regional lymph node dissection was carried out without experiencing any intractable bleeding requiring platelet transfusion. His dual APT was reinstituted on postoperative day 2, and the patient recovered soon postoperatively without any thromboembolic or bleeding complications.

Key Words: Pancreatic head cancer; High thromboembolic risk; drug-eluting coronary stent implantation; Dual antiplatelet therapy; Perioperative management

Pancreatoduodenectomy for pancreatic head cancer is one of the most difficult abdominal procedures and is associated with major intraoperative and postoperative bleeding and thromboembolic complications[1,2]. Although several months after DES implantation have passed in the current case and the timing of the operation was relatively lower risk category for stent thrombosis, it is favourable to delay such highly invasive surgery for at least 6 months after DES implantation but oncologically the surgery should not be delayed[3,4]. In this situation, a dilemma of how to manage two difficult conditions occurs perioperatively like the current case; management of intraoperative and postoperative bleeding during surgical treatment of locally advanced pancreatic head cancer, and perioperative prevention of coronary stent thrombosis[1,5]. Perioperative antithrombotic management in APT-burdened patients with high thromboembolic risks who undergo pancreaticoduodenectomy is always challenging; the potential risk of thromboembolic complications may increase when APT is halted during the operation, but intraoperative haemorrhage or postoperative bleeding might occur more frequently when preoperative APT is continued[1,4]. Rigorous perioperative antithrombotic management, as well as meticulous intraoperative dissection and hemostases using a variety of vessel-sealing devices, is required in such a troublesome situation. Recently, we showed feasibility and safety of abdominal surgery, either open or laparoscopic, under preoperative continuation of single APT with aspirin in case of patients with high thromboembolic risks[1,6]. In the present case, pancreaticoduodenectomy with regional lymph node dissection was also safely performed with neither bleeding nor thromboembolic complications under continuation of preoperative aspirin monotherapy. Thus, this strategy is one of the preferred options for compromised patients like our case.

CONFLICT OF INTERESTS

There are no conflicts of interest with regard to the present study.

REFERENCES


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