

## **Ex-situ Open Approach Spleen Preserving Splenic Hilum Lymphadenectomy**

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### **Abstract**

*Background:* multiple studies showed important benefices arising from splenic preservation in patients with digestive cancer in general and gastric cancer in particular. The minimally invasive approach remains controversial in locally advanced gastric cancer cases whilst the open approach still has an important role. This paper's aim is to describe and present the feasibility of an open surgical technique that allows removing stations 10 together with 11p and 11d with spleen and splenic vessels preservation in patients operated upon by open surgery.

*Material and Methods:* We present an open "Ex-situ" spleen and pancreas preserving surgical technique that removes the anterior and posterior ganglia from the splenic hilum, the splenic vessels and the distal pancreas in locally advanced gastric cancer cases of the upper two thirds of the stomach. Forty-three consecutive patients since 2003 were operated upon by the author in multiple centers. during upper two thirds gastric cancer resections requiring no. 10 lymphadenectomy.

*Results:* no splenectomy was needed. All the spleens were viable at postoperative Doppler echography and CT scans. No spleen migrated nor caused mechanical complications. No clinically significant pancreatic leaks were noticed. Two patients died during hospital stay, one of myocardial infarction and one of massive stroke. Pertinent follow up data and survival were not available.

*Conclusions:* The method enables the surgeon to remove the lymph nodes no. 10 along with 11p and 11d without needing to sacrifice the spleen. All spleens were reattached successfully using the preserved spleno-renal ligament fold, no wandering spleen was noticed.

**Key words:** splenic hilum, lymphadenectomy, splenic preservation, gastric cancer