Technical standardization of laparoscopic splenectomy: experience with 105 cases

<u>Corcione F, Esposito C, Cuccurullo D, Settembre A, Miranda L, Capasso P, Piccolboni D.</u>

Division of General and Laparoscopic Surgery, Monaldi Hospital, Via Bianchi 10, Naples, Italy.

BACKGROUND: Some reports have suggested that laparoscopic splenectomy (LS) can be successfully performed in adults. However, several aspects of this procedure remain as yet undefined; therefore, several attempts have been made to modify the standard technique to try to optimize the procedure. Herein we analyze our experience with 105 laparoscopic splenectomies. METHODS: From 1993 to 2000, 105 patients underwent LS at our hospital. Twelve of these patients also underwent a concomitant cholecystectomy. There were 66 women and 39 men whose ages ranged between 4 and 78 years (median, 27.7). All patients underwent an elective laparoscopic splenectomy. Seventy five patients had thrombocytopenia (ITP), 14 had hereditary spherocytosis, eight were affected by bthalassemia, two had splenic cysts, two had lymphoma, (two had myeloid chronic leukemia, one patient presented with a splenic abscess and one had incurred an iatrogenic spleen lesion during adrenalectomy. The first patients in this series were positioned in dorsal decubitus; however, as the team's experience increased, the right lateral decubitus became the position of choice because it provides better exposure of the splenic hilum. This procedure requires the use of only four trocars. RESULTS: Mean operating time was 95 min (range, 35-320). Hospital stay ranged from 2 to 21 days (median, 4.5). There was only one conversion to open surgery. One patient died in the postoperative period due to the evolution of a preexisting malignant disease. We recorded nine complications-four subphrenic abscesses, two cases of pleuritis, two episodes of postoperative bleeding, and one intestinal infarction 16 days after surgery. Only two patients needed redo surgery. CONCLUSIONS: We believe that the laparoscopic approach is a valid alternative to open splenectomy, but mastery of some of the technical details of this procedure could greatly help avoid its complications. On the basis of our experience, it seems that the lateral approach should be considered the position of choice because it provides exposure and easier dissection of the splenic hilar structures. We also found that a 30 degrees scope and an ultrasonic dissector allowed for perfect vision and optimal hemostasis during the procedure. At the end of procedure, the spleen should be fragmented and then extracted using an extraction bag.