Artery and Lymphatic Sparing Laparoscopic Varicocelectomy

Introduction and Objectives: The optimal method of varicocele repair is still a matter of debate. We prospectively evaluated the surgical technique of laparoscopic varicocelectomy with an aim to determine the invasiveness and the efficacy of the procedure.
Materials and methods: A total of 64 consecutive patients (mean age 23.2 years /± 7.8 SD/) with left-sided (n = 60), right-sided (n = 1), or bilateral (n = 3) idiopathic varicocele (grade II – III) were enrolled in the present study. All underwent laparoscopic varicocelectomy, requiring three 5-mm ports for insertion of the 4-mm camera and the laparoscopic instruments. Facilitated by the camera magnification of the surgical field, a microsurgical dissection of the spermatic vessels was performed. The testicular vein and its main branches were isolated and resected, while the testicular artery and the lymphatic vessels were preserved.
Results: Surgery was performed without any major perioperative complications, within a mean operative time of 39 min (± 12.8 SD). The patients stayed overnight and were discharged on the first day after surgery. At follow-up, fast and complete patient recovery with a cosmetic wound healing was documented in all patients. Apparent reduction of the varicose veins in the scrotum was observed 1 to 3 months after surgery in 91% of the cases. There were 2 late complications: 1 case of hydrocele formation and 1 postoperative haematoma which required surgical revision.
Conclusions: Artery and lymphatic sparing laparoscopic varicocelectomy is a viable mini-invasive treatment option that should be recommended to all patients with idiopathic varicocele.