

Two-Trocar Transumbilical Laparoscopic Surgery for High Ligation of Spermatic Vein: Report of 72 Cases

Introduction and Objective: To evaluate the clinical value of two-trocar transumbilical laparoscopic surgery for high ligation of spermatic vein.

Materials and Methods: Between May and December 2011, seventy-two cases with varicocele underwent two-trocar transumbilical laparoscopic high ligation of spermatic vein. Ten cases were from 10 to 16 year olds, 62 cases from 19 to 35 year olds. Forty-five cases were on the left side, 2 cases on the right side and 25 cases on both sides. Under general anesthesia, the patients were placed in the Trendelenburg position with head end lowered by 15°. Two 5-mm trocars were introduced into abdominal cavity at the right and left medial margin of umbilicus, respectively. A 5-mm 30° laparoscope was inserted from one of the two 5-mm trocars. The spermatic vein was dissociated at 2 to 3 cm above internal inguinal ring, and then ligated without dissection by two 7 silk sutures, which were knotted out of body and pushed into the abdomen cavity, or knotted in the body. Another side was managed using the same method if double-side varicoceles exist.

Results: All the procedures were successfully performed and no obvious complications occurred. The average operative time was 21 minutes for single side and 34 minutes for double. The average hospital stay was 4 days post-operatively. Follow-up was scheduled from 3 to 20 months; no scrotal swelling and testicular atrophy were observed postoperatively.

Conclusions: Two-trocar transumbilical laparoscopic high ligation of spermatic vein was not only safe and effective but also with less pain, shorter convalescence and good cosmesis. It may be an alternative technique for treatment of varicocele, especially for pediatrics and double varicoceles.