

## PIV4: REPEATED SURGERY FOR RECURRENT VARICOCELE IN CHILDREN

Roman Ignatiev\*<sup>1</sup>, Vladimir Rozinov<sup>1</sup>, Saidkhassan Bataev<sup>1</sup>, Nataliya Guseva<sup>1</sup>, Nodary Zurbaev<sup>1</sup>, Alexey Trusov<sup>1</sup>, Mariya Ludikova<sup>2</sup> and Mariya Sherbakova<sup>1</sup>

E-mail: Roman Ignatiev — khassan-2@yandex.ru

<sup>1</sup>Research Institute of pediatric surgery of the Russian State Medical University, Speransky children's Hospital, Moscow, Russian Federation; <sup>2</sup>Speransky childrens Hospital, Moscow, Russian Federation

**Background** The frequency of varicocele recurrences after surgery is an extremely variable quantity (0,5-35%). Most studies show that microsurgical inguinal or subinguinal ligation of veins provides significantly fewer relapses (0,5-3,7%).

**Materials and methods** During the period 2009–2016, we treated 14 patients 12,5-17 years age with recurrent varicocele. At 4 ones previously produced retroperitoneal ligation of testicular veins by open access, 9 — laparoscopic ligation. In 13 cases, laparoscopic ligation of residual testicular vein was performed. In 1 patient relapse was occurred after an open ligation of testicular vein. Based on angiography results with measurement of venous pressure in the left renal vein we had decided to hold subinguinal microsurgical ligation veins.

**Results** 4 months after that operation varicocele grade 3 relapsed again. We performed laparoscopic revision and clipping of the residual veins and simultaneous microsurgical ligation of expanded venous plexus in the scrotum by skrototomy through the Vesling's line.

Follow-up of 14–42 months demonstrate an absence of recurrence. In 2 patients in the development of a hydrocele occurred in the earl postoperative period, which disappeared after 4.5 and 8 months spontaneously. Another patient after repeated laparoscopic procedure suggests decrease of volume of the left testis by 35% relative to the right.

**Conclusions** According our experience we can recommend laparoscopic ligation of residual testicular veins as good choice in children with recurrence of varicocele.

**Key words** varicocele, children, redo surgery, laparoscopic ligation