

The Low Trans-Scrotal Orchidopexy for Undescended Testes

Introduction and Objective: We performed low trans-scrotal approach in patients with a palpable undescended testis distal to the external inguinal ring. We retrospectively reviewed our series of this technique to evaluate operative times, success rates and complications.

Materials and Methods: A total of 265 orchidopexy were performed in patients with undescended testes or retractile testes between January 1996 and June 2005. Among them, trans-scrotal orchidopexy was performed in 69 undescended or retractile testes of 45 patients. The operative indication for low trans-scrotal orchidopexy included an undescended testis that lies distal to the external ring and can be pulled down into the scrotum under general anesthesia. Medical charts were retrospectively reviewed to obtain the demographic data, laterality, preoperative position of the testes, and patency of the processus vaginalis. The above data were compared to those of the undescended testis at the similar location managed with the standard inguinal orchidopexy.

Results: Among 69 testes managed by the low trans-scrotal approach, 49 testes were distal to the external inguinal ring and 20 were diagnosed retractile testes preoperatively. All testes that were tried to perform low trans-scrotal approach were successfully fixed in the middle of the scrotum. No patients required conversion to the traditional inguinal incision. Mean operative times of trans-scrotal orchidopexy and those of 107 inguinal orchidopexy for undescended testes at the similar location were 46.1 (25-100) minutes and 66.6 (22-144) minutes respectively, and the former was significantly shorter than the latter. With median follow-up duration of 36.6 (12.1-80.8) months, all testes except one testis (98.3%) are located at the good position of the scrotum with good consistency. Any testis has not become atrophic. There has been no inguinal hernia or hydrocele. One undescended testis was ascended postoperatively, and required inguinal orchidopexy. Any other complication such as wound infection or scrotal hematoma has not been encountered.

Conclusion: Low trans-scrotal orchidopexy seems to be an excellent alternative of the standard inguinal orchidopexy for the undescended testis distal to the external inguinal ring with less operative times, good cosmesis and low complication rate. Important processes of the trans-scrotal orchidopexy might include secure transection of processus vaginalis even in case of fibrous remnant and narrowing of the opening of the dartos fascia.