

Single-Port-Access Nephrectomy and Other Laparoscopic Urologic Procedures Using a Novel Laparoscopic Port (R-Port)

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Abstract

Objectives

To report an initial clinical urologic experience with a new laparoscopic access port (R-Port) and the advent of the single-port access (SPA) procedure and one-port umbilical surgery (OPUS).

Methods

Five patients underwent therapeutic laparoscopic interventions (two simple nephrectomies for end-stage kidney disease consequent to stone disease, one orchidopexy, one orchidectomy, and one ureterolithotomy), with one R-Port used for each. Three of these procedures were OPUS, and the other two were SPA procedures. In all cases a 5-mm 30° telescope and two 5-mm working instruments were inserted through the port. In the case of the nephrectomies, hemostasis and pedicle control was obtained with the Harmonic Scalpel and Hem-o-lok clips; a novel multi-instrument port cap allowed for safe introduction of a 10-mm clip applier. Frequent instrument changes effected as necessary to allow the operative procedure to proceed to completion did not affect the seal.

Results

All procedures were completed uneventfully. Operative time averaged 83 minutes. There were no perioperative port-related or surgical complications in these cases.

Conclusions

The R-Port allows laparoscopic surgery to be performed safely with fewer ports, thereby allowing for SPA and OPUS with their inherent cosmetic advantages and reduction in postoperative discomfort. More studies are being carried out.