

provement rate. Of the patients studied, approximately 18% required removal of the device. Of those cases that need explantation, 50% of the women still opted to be reimplemented within 12 months after the initial device removal. Presumably, secondary to position of the adjustment port, sexual activity was associated with a higher complication rate.

An interesting technology, which is not overly dissimilar to the genitourinary spheroidal membrane, which had its greatest degree of clinical exposure in the mid-1990s (1). Problems with the genitourinary spheroidal membrane at that time included the lack of ability for secondary and tertiary adjustments as well as the tendency of the device to float into non-therapeutic positions in the retropubic space. It seems that the adjustment port of this device, which is placed at the labia majora, may help anchor the support balloons and keep them from migrating to non-therapeutic positions as well as providing a method for adjustment. Perhaps these modifications will allow it to have a greater shelf life than that experienced by the genitourinary spheroidal membrane.

### Reference

1. Darson MF, Malizia AA, Barrett DM: Periurethral injection of the genitourinary spheroidal membrane. *J Endourol.* 1996; 10: 283-6.

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## PEDIATRIC UROLOGY

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### **Long-term followup of dextranomer/hyaluronic acid injection for vesicoureteral reflux: late failure warrants continued followup**

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**Purpose:** Dextranomer/hyaluronic acid injection of ureteral orifices is a popular option in the treatment of vesicoureteral reflux, with success rates ranging from 69% to 89%. We found only 1 study that followed patients beyond the initial postoperative voiding cystourethrogram, which describes a 96% success rate at 2 to 5 years but defines success as "nondilating" reflux. We examined our dextranomer/hyaluronic acid series to evaluate the long-term (1-year) outcome in children who had resolution of reflux on initial postoperative voiding cystourethrography.

**Materials and Methods:** We retrospectively reviewed our dextranomer/hyaluronic acid experience from February of 2002 to December of 2005. We determined initial success on early (6 to 12-week) postoperative voiding cystourethrogram. We then evaluated long-term success by obtaining a voiding cystourethrogram at 1 year postoperatively in patients who were initially cured of reflux. In addition, success rates between the first and second halves of our experience were evaluated to account for surgeon experience and modification of technique.

Results: Our total success rate at initial voiding cystourethrogram was 73% (246 of 337 total ureters). The success rate in the first half of our experience was 65.9% (112 of 170 ureters) and in the second half was 80.2% (134 of 167). A total of 150 ureteral units with initial successful dextranomer/hyaluronic acid treatment were evaluated at 1 year by voiding cystourethrogram. Of these ureters 111 had continued resolution of vesicoureteral reflux, for a long-term success rate of 74%. Including initial postoperative failures, the complete 1-year total success rate was 46.1% (111 of 241 ureters).

Conclusions: Although the reflux resolution rates at initial postoperative voiding cystourethrogram approach those of open surgery, there is a significant failure rate at 1 year, which warrants long-term followup.

### Editorial Comment

This manuscript shows an almost 4-year experience with 219 patients and 337 ureters. The 6-12 week postoperative VCUGs showed a success rate of 73% and a one year VCUG on the same patients who had initial resolution showed a lower 74% success rate. Considering the overall patients altogether, the total success rate at one year was 46.1%. 74 of their 219 patients dropped out of the study and did not complete the VCUG at one year after surgery. The authors did note that switching to the HIT technique improved their early success from 65.9 to 80.2%. However, at one year after surgery their success rate was essentially identical at 74.2 and 73.8%. There was no statistical difference in STING versus HIT techniques in their study. If the data was broken down by grade of reflux, 100% of Grade I reflux was gone one year later, and 79.8% of Grade II reflux was gone one year later. Grade III reflux was 37.2%. The authors suggest that Deflux may be considered in low-grade refluxes but the long-term outlook for higher grades of reflux is particularly disappointing.

This manuscript brings into question the long-term success of injection therapy for reflux and in particular, the need for long-term radiographic follow up for these patients. If the criterion for success is absence of reflux, Deflux treatment will need to be reconsidered by those who take care of this disease in children.

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### Long-term outcome of laparoscopic Fowler-Stephens orchiopexy in boys with intra-abdominal testis

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Purpose: We reviewed the records of 36 pediatric patients operated on between 1990 and 1997 for high intra-abdominal testes, using the 2-step Fowler-Stephens procedure via laparoscopy.

Materials and Methods: Patients were followed for 10 to 17 years. Three patients who had undergone the second stage by open procedure were excluded from study. The 33 remaining patients were contacted by telephone, and 12 (7 with right and 5 with left intra-abdominal testes) agreed to undergo clinical and instrumental examination. Patient age ranged from 13 to 26 years (average 14.7). All patients underwent clinical examination and volumetric measurement of both testes using color Doppler ultrasound.

Results: Two of the 12 patients (16.7%) had an atrophic testis in the scrotum and 10 (83.3%) had a viable testis in the scrotum. The operated testis was always smaller than the normal testis, despite the good vascularization