Infundibulopelvic colpopexy with partial resection of vagina for repair of posthysterectomy vault prolapse

To the editors

Vaginal vault prolapse after hysterectomy is a rare but very unpleasant complication. I read with great interest the paper on this subject by Barber et al.\(^1\) in the 2000 December issue.

They stated that numerous surgical techniques had been described for the treatment of posthysterectomy vaginal vault prolapse, yet none of them has been shown to be superior as a long-term treatment that is safe, well-tolerated, and effective.\(^1\) They cited a recent review of transvaginal repair of vault prolapse that found more than 40 different procedures in the literature.\(^2\)

In the available literature, I have not found any data on transabdominal colpofixation to the infundibulopelvic, uterosacral, and round ligaments after partial resection of the vagina. I learned this method from Professor László Lampé in Debrecen, Hungary. He described his procedure as “suspensio vaginae physiologica” carried out in 14 patients with posthysterectomy vault prolapse between 1973 and 1982.\(^3\) The suspension is “physiologic” because the vagina is not fixed to the symphysis, promontorium, or sacrum, which could cause malposition of the vagina and pelvic pain. This colposuspension procedure has been combined with the Burch urethrovaginal fixation in 8 cases by Domány and Bódis also in Hungary.\(^4\)

During the last 10 years (July 1990-July 2000) in the I. Department of Obstetrics and Gynecology, Semmelweis University Medical School in Budapest, the procedure was slightly modified and performed in 52 patients. **Operative procedure:** After laparotomy, the peritoneal covering of the vaginal vault between the bladder and the rectum is opened, and the vaginal wall is drawn upward by Kocher clamps. The bladder and the rectum are separated downward, and the ureters are prepared and separated laterally from the vaginal wall in the paracolpium. Three to 5 cm of the elongated vaginal wall is resected, and sutures with an absorbable surgical suture material produced from polyglycolic acid (1 or 1/0) are used to close the vagina, which is fixed by the sutures placed into the infundibulopelvic, sacrouterine, and round ligaments. If the adnexa are present, bilateral adnexectomy is also performed. The area is covered and elevated by the overlapping peritoneum. After 6 weeks, an anterior or posterior vaginal colporrhaphy, or both, is considered.

**Patients:** The procedure was offered and performed in 52 women (aged 40 to 84 years; median age at operation was 65 years) after vaginal (41 cases) or abdominal (11 cases) hysterectomy and in 29 cases with bilateral adnexectomy with total vault prolapse (vaginal eversion) with or without urinary incontinence. The median number of years to vault prolapse repair after hysterectomy was 12.8 (range, 0.6-32.4 years). In 11 cases, anterior or posterior colporrhaphy because of cystocele or rectocele, or both, was subsequently needed. Patients were followed up yearly by pelvic examination; in 3 of 52 patients the vaginal eversion partly recurred and the infundibulopelvic colpopexy was repeated. All patients (including the 3 recurrent cases) have a functional vagina without urine incontinence and without pelvic pain or any pelvic discomfort. Forty-eight of 52 patients (92.3%) indicated satisfaction with the result. Intraoperative complications included entry into the bladder (2/55, 3.6%), vault hematoma (3/55, 5.5%), and transitory voiding difficulty (5/55, 9.0%).

The operation seems simpler than others that are commonly used, and our patients are satisfied.

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References


To the editors

We appreciate Dr Papp's interest in our article and found the description of his abdominal colpofixation technique intriguing. We hope that we will be able to review this work in greater detail, and we encourage him to submit his data as a manuscript to a peer-reviewed journal.

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Computed tomography and locating ureters in relation to the uterine cervix

To the editors

I would like to comment on 2 points made in a recent article by Hurd et al.1 First, the authors’ finding that 12% of the 52 women in their study had at least 1 ureter located <0.5 cm from the lateral cervix suggests an explanation as to why a surgeon is shocked to find that a ureter has been transected or obstructed during “a chip shot” benign hysterectomy, ostensibly accomplished without incident, while performing the usual “uterus hugging” extra-fascial hysterectomy technique.

The best interest of the patient will not be served if the authors’ final advice (ie, “routine intra-fascial placement of cervical pedicle clamps” in benign disease) continues to fall on deaf ears.

I laud the authors’ concluding statement that this study “supports routine intra-fascial placement of cervical pedicle clamps to minimize the risk to the ureter.” It also provides additional fuel to the fire of controversy, which may ultimately wrest routine extra-fascial hysterectomy from the dead hand of tradition. Those particular “ureters which are less than 0.5 cm” from the cervix await the “uterus huggers” who don’t habitually palpate the ureters before and after a “one click” clamp application on the extra-fascial paracervical pedicles.
Secondly, a tangential comment regarding the demonstration of unequal distances of the ureters and the cervix from the pelvic side walls, observed in Fig. 2: These variances are consistent with the serendipitous finding of a right paravaginal break in the “suspension” mechanism of the upper third of the vagina, on the right side (ie, vaginal support level I). Note the sag of the right bladder base relative to the left; the increased distance of the right ureter to the pelvic side wall, and the same for the cervix. The cervix deviates to the left as it sags toward the “intact” tethered left side. The left cervical deviation is further illustrated when a line is drawn from the linea alba, between the pyramidalis muscles, down to the coccyx. Comparative views of a similar defect may be seen in both cadaver and computerized axial tomography scans, in a radiological atlas of comparative cross-sectional anatomy and computer-assisted tomography scans.2

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References


To the editors

We would like to thank Dr Huddleston for his comments on our recent study. We agree with him that the results of our study may help to explain the surprisingly high risk of ureteral injury during routine hysterectomy. Based on the wide variation in distance between the ureter and cervix we found in our study, the classical intrafascial hysterectomy technique of leaving behind a small amount of cervical stroma with each pedicle appears to be a reasonable approach to minimizing ureteral injury. His second point is also of interest. We are uncertain why the cervix and the ureters seemed to be slightly deviated to the left in the patients we studied. However, Dr Huddleston’s observation that these findings are consistent with his own and others may be some assurance that the women we studied were a reasonably representative sample.1

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