

Recent literature with comments

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Incorporation of extensive upper abdominal surgery into the operative strategy can lead to benefit in advanced ovarian cancer.

A prospective outcomes analysis of palliative procedures performed for malignant intestinal obstruction due to recurrent ovarian cancer.

Chi DS, Phaëton R, Miner TJ, Kardos SV, Diaz JP, Leitao MM Jr, Gardner G, Huh J, Tew WP, Konner JA, Sonoda Y, Abu-Rustum NR, Barakat RR, Jaques DP. *Oncologist*. 2009 Aug;14(8):835–9. Epub 2009 Aug 14

Objective: To obtain prospective outcomes data on patients (pts) undergoing palliative operative or endoscopic procedures for malignant bowel obstruction due to recurrent ovarian cancer.

Methods: An institutional study was conducted from July 2002 to July 2003 to prospectively identify pts who underwent an operative or endoscopic procedure to palliate the symptoms of advanced cancer. This report focuses on pts with malignant bowel obstruction due to recurrent ovarian cancer. Procedures performed with an upper or lower gastrointestinal (GI) endoscope were considered “endoscopic.” All other cases were classified as “operative.” Following the procedure, the presence or absence of symptoms was determined and followed over time. All pts were followed until death.

Results: Palliative interventions were performed on 74 gynecologic oncology pts during the study period, of which 26 (35%) were for malignant GI obstruction due to recurrent ovarian cancer. The site of obstruction was small bowel in 14 (54%) cases and large bowel in 12 (46%) cases. Palliative procedures were operative in 14 (54%) pts and endoscopic in the other 12 (46%). Overall, symptomatic improvement or resolution within 30 days was

achieved in 23 (88%) of 26 patients, with 1 (4%) postprocedure mortality. At 60 days, 10 (71%) of 14 pts who underwent operative procedures and 6 (50%) of 12 pts who had endoscopic procedures had symptom control. Median survival from the time of the palliative procedure was 191 days (range, 33–902) for those undergoing an operative procedure and 78 days (range, 18–284) for those undergoing an endoscopic procedure.

Conclusion: Patients with malignant bowel obstructions due to recurrent ovarian cancer have a high likelihood of experiencing relief of symptoms with palliative procedures. Although recurrence of symptoms is common, durable palliation and extended survival are possible, especially in those patients selected for operative intervention.

COMMENTARY

The majority of women who develop epithelial ovarian cancer present with advanced-stage disease. For these patients, standard initial therapy consists of cytoreductive surgery, followed by combination platinum–taxane chemotherapy. Many pretreatment prognostic factors have been found to impact overall survival. Few, however, have had the durable effect of optimal cytoreduction at primary surgery. Optimal cytoreduction has been associated with improved survival. Optimal cytoreduction to ≤ 1 cm residual disease is most easily achieved in patients with limited initial tumor burden. The question has been posed as to whether more extensive metastatic spread is a reflection of aggressive tumor biology that may benefit less directly from surgical resection. However, numerous studies have demonstrated that optimal cytoreduction in these patients is associated with long-term survival.

For patients presenting with widespread upper abdominal disease, diaphragm peritonectomy and/or resection, splenectomy, and liver resection are among the procedure

reported to be both feasible and associated with acceptable morbidity for cytoreduction of ovarian cancer.

Recently, accumulated evidence has suggested an associated survival benefit to these interventions in appropriate patients.

In order to improve their optimal cytoreductive rates, Chi D. S. et al., in this article, explain how they have expanded their surgical efforts by incorporating extensive upper abdominal surgery into the primary cytoreductive effort. The aim of their study was to determine the impact of the incorporation of extensive upper abdominal procedure on progression-free survival (PFS) and overall survival (OS) in advanced ovarian cancer.

Extensive upper abdominal surgery procedures were defined as diaphragm peritonectomy and/or resection, splenectomy, distal pancreatectomy, partial liver resection, cholecystectomy, and resection of tumor from the porta hepatis.

They have compared two groups of patients; the first (group 1), the control one, subjected to standard cytoreductive surgery, was treated in the period from 1996 to 2004, and the study one (group 2), who also underwent extensive upper abdominal surgery, treated from 2001 to 2004. For the group 1, the 5-year PFS rates were 14%, the 5-year OS was 35%, the median OS was 43 months vs 5-year PFS rates of 31%, 5-year OS of 47%, and median OS of 54 months in group 2. This study is well designed because the two groups are similar for what concerns the preoperative and intraoperative prognostic factors. The only significant difference between the two groups, in these areas, was in the histological tumor subtypes but this had no clinical impact.

The strengths of this study are the homogeneity of the patient populations studied, the consistent management approaches separated only by time period and differing only in surgical approach. The weaknesses are that the study is retrospective (the authors said it in the discussion of their study) and the management approaches after primary therapy were not controlled but the latter had no impact on survival.

This study must be read as it represents an important confirmation that the incorporation of extensive upper abdominal surgery into the operative strategy can lead to a significant increase in PFS and OS in advanced ovarian cancer.

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An exceptional study that provides important confirmation of the long-term efficacy of the TVT procedure.

Eleven years prospective follow-up of the tension-free vaginal tape procedure for treatment of stress urinary incontinence.

Nilsson CG, Palva K, Rezapour M, Falconer C. *Int Urogynecol J Pelvic Floor Dysfunct.* 2008 Aug;19(8):1043–7. Epub 2008 Jun 6

Objective: The aim of this study was to evaluate the long-term effectiveness and safety of the tension-free vaginal tape (TVT) procedure.

Methods: In a Nordic three-center prospective observational cohort study, 90 women with primary stress incontinence had a TVT operation performed in local anesthesia. Assessment included a 24-h pad test, a stress test, physical examination, and a visual analog scale for assessing the degree of bother. Patient's global impression of cure was obtained, and condition specific quality of life questionnaires were used.

Results: Seventy-seven percent of the initial cohort of 90 women and 89% of those alive and capable of cooperating were assessed 11.5 years after the TVT operation. Ninety percent of the women had both a negative stress test and a negative pad test being objectively cured. Subjective cure by patients global impression was found in 77%, 20% being improved and only 3% regarded the operation as a failure.

Conclusions: No late-onset adverse effects of the operation were found, and no case of tape erosion was seen. The TVT procedure is safe and effective for more than 10 years.

COMMENTARY

The tension-free vaginal tape (TVT) procedure was developed during the early 1990s and introduced as a minimally invasive operation for the treatment of stress incontinence in 1996 [1]. The number of procedures

performed rose exponentially in the early years, and the TVT became widely accepted as a safe and effective procedure with a low rate of complications. Although other related procedures have since been introduced, such as the transobturator tape, the TVT, as the first modern midurethral sling operation, has the longest duration of follow-up data. It has been proven to maintain high efficacy (>80%) over a period of 7 years [2, 3].

This multicentre prospective observational cohort study reports the longest period of follow-up for the TVT, an average of 11.5 years. The authors have previously published 5- and 7-year data for the same cohort of 90 women with urodynamically proven stress incontinence, who were enrolled in one of the earliest prospective clinical trials between January 1995 and August 1996 [3, 4]. The initial trial had strict inclusion and exclusion criteria and a robust study protocol. Of the original 90 women, 69 could be evaluated for the present study (77%). Six women had died; seven were not medically fit for review; eight were lost to follow-up. The cough stress test was negative in 95.3%, and 90.2% had a negative pad test demonstrating excellent objective cure rates. The Patient Global Impression scale was used to assess subjective cure: 77% regarded themselves as cured, 20% improved, and 3% thought the treatment had failed. Ninety-seven percent were prepared to recommend the treatment to a friend. Ninety-three percent had a postvoid residual urine of <100 ml, and no patients needed intermittent self-catheterization for voiding obstruction. No cases of tape erosion were detected on vaginal examination.

Although there was a noticeable difference in objective and subjective cure rates, the authors did attempt to explain this by looking at any new medical conditions, surgery, or medication which could affect their global impression of treatment success. We must also consider the effect of recall bias with such a long duration of follow-up [5]. However, even if we concentrate on subjective cure, 77% at 11 years compares favorably to the authors' previous results for this cohort of women: 84.7% at 5 years and 81.3% at 7 years. Very few complications were reported in this study, but one must remember that, although infrequent, the TVT procedure does carry a risk of bladder perforation, vascular injury, and hemorrhage, infection, voiding dysfunction, urinary tract infection, de novo urgency, and tape erosion. Many of these can be related to surgeon experience, as there is a procedural learning curve, highlighting the importance of adequate and systematic training for surgeons performing continence procedures.

This is an exceptional study, and these results provide important confirmation of the long-term efficacy of the TVT procedure. The fact that there is no decline in efficacy over such a long period of follow-up in an aging population is very reassuring.

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Retropubic TVT is a good procedure for persistent of recurrent stress incontinence after a previous failed procedure

Tension-Free Vaginal Tape in the Management of Recurrent Urodynamic Stress Incontinence after Previous Failed Midurethral Tape.

Liapis A., Bakas P., Creatsas G. Eur Urol 2009;55:1450–8

Objective: Data about the use of tension-free vaginal tape (TVT) in the management of recurrent urodynamic stress incontinence (RUSI) after previous failed midurethral sling procedure (MUSP) are limited. Assessment of the efficacy and the indications of the TVT procedure in the management of patients with RUSI after failed previous MUSP.

Methods: Thirty-one patients with RUSI after previous failed MUSP were prospectively enrolled at a single tertiary academic center. Preoperatively and postoperatively, patients were assessed with physical examination, urinalysis, urine culture, bladder diary for 2–3 d.

Q-tip test, uroflow, filling and voiding cystometry, urethral profilometry, and 1-h pad test. Mean follow-up was at 18.6 mo (range: 12–28 mo).

Results: Overall, the objective cure rate based on the pad test findings was 74%, the improvement rate was 6.5%, and

the failure rate was 19.5%. The objective cure rate based on cough stress test during filling cystometry was 77.4%, and the subjective cure rate based on patients' answers was 71%. The study could have some limitations. The relatively small number of patients enrolled could affect the findings of study to some degree. Additionally, because urethral pressure profiles show a significant degree of directional dependence when side-hole microtip transducers are used, as in the present study, the orientation of the transducer could affect the values measured.

Conclusions: The TVT procedure as a second operation could provide an overall cure rate of 74% with a low complication rate in female patients with RUSI after previous failed midurethral tape procedures.

COMMENTARY

This manuscript reports about tension-free vaginal tape (TVT) as management of persistent stress incontinence in patients who have a previous failed midurethral tape. The overall cure rate in the 31 analyzed patients was 74%, and the complication rate appeared to be low.

The study is relevant and worth reading as there is not a lot of evidence about the optimal management of failed midurethral sling procedures. Similar publications reported about smaller numbers of patients. However, studies like this have one serious limitation which is the difficulty to translate the results to the individual patient that seeks medical help because of recurrent or persistent stress incontinence. All included patients differ in their characteristics (and so in their individual risk for failure) and also in the first surgical procedure they underwent, the type and severity of micturition symptoms prior to the first procedure, and the technical performance of the surgeon doing their first procedure.

In 26% of the patients, repeated surgery failed and the question is whether these patients could have been better managed by conservative treatment or by an alternative surgical procedure. To understand why incontinence procedures fail requires more than proper history taking and performing urodynamic investigation. The first question is whether the primary surgical procedure was well performed. In this study, one out of three patients had undergone TVT secure of which the subjective and objective outcome is not as good as compared to retropubic or transobturator midurethral tapes. In addition to that, the primary procedures may have been a part of the surgeon's learning curve which could have a significant effect on the outcome. Furthermore, the tape could be placed too distally or too proximally, as well as too tense or too loose under the urethra. These are all technical aspects that could affect the outcome and that may be diagnosed by the use of ultrasound.

The second question is whether the primary diagnosis was correct. The authors do not report the results of urodynamic investigation prior to the first surgical procedures. It is even possible that urodynamic investigation was not performed at all prior to the first surgical procedure.

I agree with the author's conclusion that retropubic TVT is a good procedure for persistence of recurrent stress incontinence after a previous failed procedure. This does not mean that performing a transobturator tape or a minisling would be a wrong choice. Especially for those who have already had a retropubic tape, it might be a good decision to select a transobturator approach during redo surgery.

To further improve the management of recurrent stress incontinence, research should focus on understanding the underlying mechanism of a failed procedure. Ultrasound could play an important role in this process. The observation that the cure rate of repeated surgery is quite high should encourage physicians to follow-up on their patients to identify failures and to counsel their patients that there are acceptable options to cure their symptoms.

For that reason, I consider this manuscript as relevant and think that it is an important confirmation of what many gynecologists and urologists may have observed in their daily clinical practice.

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A first report on a comparison of a validated measure of quality of life in transsexual patients with controls

Quality of life 15 years after sex reassignment surgery for transsexualism.

Kuhn A, Bodmer C, Stadlmayr W, Kuhn P, Mueller MD, Birkhäuser M. Fertil Steril. 2009 Nov;92(5):1685–1689. e3. Epub 2008 Nov 6.

Objective: To evaluate quality of life and patients' satisfaction in transsexual patients (TS) after sex reassignment operation compared with healthy controls.

Methods: Patients after sex reassignment operation were compared in a case-control study with a similar group of healthy controls in respect to quality of life and general satisfaction. For quality of life we used the King's Health Questionnaire, which was distributed to the patients and to the control group. Visual analogue scale was used for the determination of satisfaction. The Main outcome measures were quality of life and satisfaction.

Results: Fifty-five transsexuals participated in this study. Fifty-two were male-to-female and 3 female-to-male. Quality of life as determined by the King's Health Questionnaire was significantly lower in general health, personal, physical and role limitations. Patients' satisfaction was significantly lower

compared with controls. Emotions, sleep, and incontinence impact as well as symptom severity is similar to controls. Overall satisfaction was statistically significant lower in TS compared with controls.

Conclusions: Fifteen years after sex reassignment operation quality of life is lower in the domains general health, role limitation, physical limitation, and personal limitation.

COMMENTARY

This study reports on the quality of life and satisfaction of transsexual individuals after sex reassignment surgery (SRS) as compared to a group of healthy controls.

Although psychosocial outcome data gathered preoperatively and postoperatively with validated tools remain scarce, a few recent studies with postoperative data on quality of life (QOL) have been published [1–3]. The few studies that have reported on sexual functioning after transition showed overall good results [4–6]. However, a very recent study from our group showed that male-to-female (MTF) patients seem to suffer from specific difficulties regarding sexual arousal, lubrication, and pain [3].

The authors are correct in stating that they are the first to report on a comparison of a validated measure of QOL in transsexual patients with controls. Therefore, this article is valuable and can be recommended.

There are nevertheless important methodological flaws concerning this study. First of all, the results are generalized for all transsexual individuals while in fact the group consists of 95% of MTF patients. Secondly, the control group is much smaller than the case group and consists only of medical staff members. This group of women, all working in the medical sector, can hardly be considered as a reliable sample. It could be expected that their social and educational backgrounds are considerably different to that of the transsexual sample and that the appreciation of their general health equally is. Further, as the authors already indicate, the large difference in surgical history between both groups could have induced an important bias. Moreover, only 40% of the transsexual individuals were engaged in a relationship compared to 90% of the controls. There is however undoubtedly a relationship between general health and the existence of an intimate partner relationship [7, 8]. And finally there is no information on the quality of life of this group of transsexuals before SRS. When comparing the general and mental health in a group of 50 MTF individuals using the validated SF-36 health survey with a historical control group of American and Dutch women, we recently showed overall good results [3]. General health was not significantly different and, when compared to the American women, MTF individuals only scored significantly worse on the level of physical

functioning. Moreover, we showed that MTF individuals involved in a relationship had significantly better SF-36 scores as compared to the single ones.

Information on the QOL and general health status of transsexual individuals is important, but probably even more important is the change that is induced by the treatment. Therefore, there is an urgent need for a well-designed prospective trial.

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The article is a must-read article as it presents a controversial issue and addresses the laparoscopic management of ureteral injuries.

Laparoscopic management of ureteral lesions in gynecology.

De Cicco C, Schonman R, Craessaerts M, Van Cleynenbreugel B, Ussia A, Koninckx PR. *Fertil Steril*. 2009 Oct;92(4):1424–7. Epub 2008 Oct 18.

Objective: To investigate the outcome of laparoscopic repair of ureteral injury in laparoscopic gynecologic surgery.

Methods: Forty patients with a ureteral lesion in laparoscopic surgery between 1991 and 2007 received laparoscopic ureteral repair, laparoscopic-assisted or blind stent insertion. Treatment outcome of ureteral lesion analyzed by type of injury, time of diagnosis, and management.

Results: In 4,350 consecutive laparoscopic gynecologic interventions, 42 lesions occurred, 5 during hysterectomy, 1 during adnexectomy, and 36 during deep endometriosis surgery. In the latter group ($n=1,427$), the incidence was 1.5% and 21% in women without and with hydronephrosis, respectively. In eight women in whom a stent was inserted after surgery without laparoscopic guidance, five were uneventful and three needed a second intervention. In all 34 women in whom a laparoscopic repair over a stent was performed, the outcome was uneventful, whether diagnosed and treated during surgery ($n=25$) or after surgery ($n=9$).

Conclusions: Laparoscopic repair over a stent was uneventful for all lacerations, transections, and fistulas, whether performed during or after surgery, and was superior to blind stent insertion. In women with hydronephrosis and deep endometriosis, a preoperative stent insertion seems to be mandatory.

COMMENTARY

This article presents an argument that seems to antagonize contemporary understandings. It suggests that the “belief that delayed diagnosis of ureteral injuries impairs outcome seems not to be substantiated” and that a ureteral anastomosis performed 28 days later was uneventful and easy. This “bold” statement was also based on a 2007 comprehensive review by the same group. The uneventful repair after 28 days could be attributable to the stent already in place with no resultant back pressure on the ipsilateral kidney, thus contributing to the uneventful outcome even though suturing was difficult due to edema. With ureteral injury, renal deterioration is inevitable unless urine flow is restored. The ureter is the sole conduit from the kidney. My understanding is that ureteral injuries have the best prognosis when recognized and repaired intraoperatively. As many as 25% of unrecognized ureteral injuries result in eventual loss of the affected kidney [1]. Even if ureteral injuries occur despite a meticulous surgical technique, the next vital step is intraoperative recognition and repair [2]. Primary repair, as clearly shown in this article, often is easier, is more successful, and has medicolegal advantages. Weingertner et al. state that 70% of cases of ureteral injury were diagnosed postoperatively which would underline the necessity of having appropriate tools to prevent and or

identify perioperatively any potential injury [3]. It would have been helpful to ascertain if cystoscopy with indigo carmine was utilized at the initial surgery for the group with delayed diagnosis of ureteral injury, in order to highlight the failure rate of cystoscopy in identifying ureteral injuries, if any.

The authors suggest that primary laparoscopic management was superior to treatment after surgery by blind stenting ($n=8$, $P=0.03$) and the postoperative leakage group ($n=3$, $P=0.04$). However, the P values were high, and patient numbers were small. Furthermore, the outcome of treatment, whether intraoperatively or after a delayed diagnosis, did not differ significantly. This should be interpreted cautiously, as the lack of significance could be attributable to small numbers whereas larger numbers could have shown different conclusions. Evaluation of the efficacy of different treatments when dealing with uncommon complications is difficult, as we must draw only on case reports and case series. In such circumstances, publication bias can produce an overoptimistic impression of treatment effect [4].

The authors conclude that in deep endometriosis without hydronephrosis liberal use of stenting is not indicated. With potential morbidities, need for reoperation and medicolegal concerns with inadvertent, missed ureteral injury in deep endometriosis would there not be a benefit of using intraoperative illuminated ureteric stents in all such cases as the benefits of stenting outweighs any small risk of infection, hematuria, or pain from stents.

The strength of this article is that it is prospective with contemporaneous recording of complications. The group's expertise in advanced laparoscopy, laparoscopic management of complications, and multidisciplinary approach is commendable. I believe this article is a must-read article. It presents a controversial issue and addresses the laparoscopic management of ureteral injuries, thereby ameliorating the dearth of evidence on a new approach to manage such lesions.

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