MULTIPLE URINARY TRACT INJURIES DURING ABDOMINAL HYSTERECTOMY

(A Case Report)

by

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Urinary tract, particularly the pelvic part of the ureters and bladder are vulnerable to injuries during pelvic surgery. Unilateral ureteric injury has been reported from various clinics after gynaecological operations, but bilateral ureteric injury along with vesical laceration is very rare. In this paper we are presenting a case of bilateral total transection of ureters along with vesical laceration following abdominal hysterectomy for benign gynaecological condition with review of literature.

CASE REPORT

M. M. 40 years Para 1 + O who had abdominal hysterectomy for fibroid uterus in a subdivisional hospital on 9-6-78 was referred to Eden Hospital on 10-6-78 for complete anuria. She was in profound shock. Her pulse was 140/min; B.P. 70/? Paller + (Hb. 7.5 Cm%) inspite of 2 bottles of blood transfusion after primary surgery. Respirations were shallow with cold and clammy extremities. There was evidence of peritonitis and paralytic ileus. Abdominal dressing was soaked with urine. Case was diagnosed as intraperitoneal injury of bladder as proved by escape of lotio acriflavine (which was instilled into the bladder through a catheter via urethra) through the abdominal wound.

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Management: After preliminary treatment of shock by infusion, transfusion, corticosteroid and emptying the stomach by gastric suction—abdomen was opened through previous incision under general anaesthesia. Peritoneal cavity was cleaned of urine and bladder delineated which showed 2 large transverse lacerations each 3 Cm. in length, one situated in the posterior wall and the other very close to trigone. They were closed in layers with atraumatic catgut. In spite of successful repair of bladder injuries (proved by dye test) constant wetting of the operation field lead us to suspect concurrent ureteric injury. The right side ureter was found to be pierced by ligature at the level of uterine artery resulting in continuous oozing of urine. Lower 2 Cm. of the right ureter was so badly mutilated, that it was beyond local repair. Left ureter was found to be dilated and lower 3-4 cm. of ureter beyond the dilated portion was completely missing. A bilateral submucosal tunnel reimplantation of ureter into the bladder was done. Bilateral ureteric splintage was left for 2 weeks. For left side 'Psoas Hitch Procedure' was undertaken. Suprapubic cystotomy drainage and rubber drainage were left in the space of Retzius; Postoperative period was very stormy. She received two bottles of blood and ampicilin. Patient went home on 28th postoperative day with a big vesico-vaginal fistula at vaginal vault which developed on 3rd postoperative day.

Investigation: Blood biochemistry was normal and I.V.P. done 3 weeks after the second operation showed patency of both ureters with obstructive change in the right kidney.

Follow up: Patient came on December 1978 for repair of vesicovaginal fistula but she was

found to be suffering from Jaundice and was admitted in Medical side for treatment.

Discussion

During 1978 more than 300 abdominal hysterectomies were done in this hospital for both gynaecological and obstetrical conditions without a single ureteric injury. Case under discussion had both ureters transected and there was also a vesical laceration which is very very rare. Bilateral ureteric injuries is very rare. Horrow (1954) reported 81 cases of bilateral ureteric injury.

In this case there was no evidence of malignancy or history of previous operation and infection and hysterectomy was done for uterine fibroid and even then the bladder was lacerated in two places. Ureter may be transected, occluded or ligated. In reviewing the literature we find ratio of transaction, occlusion and ligation as 10:1:4. Case under discussion had both ureters transected with complete ligation of left ureter and partial occlusion of right ureter along with vesical laceration. Complete anuria following hysterectomy indicates either bilateral ureteral trauma or acute renal insufficiency (Reflex-anuria). Soakage of abdominal dressing by urine excluded the possibility of acute renal insufficiency and suggested urinary tract injury.

Our case had all the features of intraperitoneal extravascation of urine. Escape of acrifline lotion through abdominal wound suggested injury to bladder but as there was no dribbling of urine from the vagina possibility of ureteric injury either unilateral or bilateral was kept in mind. Though the condition of the patient was very bad, we thought that unless the patient was relieved of chemiral peritonitis she would die. Repair of bladder laceration and uretero-vesical implantation was done after initial resuscitation.

Mortality after bilateral ureteric injury is reported in literature varies from 8.6% (Wesolowski 1969) to 50% (Feiner 1938 and Adama 1943). Case under discussion inspite of multiple urinary tract injuries survived but developed a vesicovaginal fistula and some obstructive lesion in right kidney suggest our decision to perform immediate operation and surgical approach of the condition was justified.

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