

URETERIC INJURY IS RARER THAN PREVIOUSLY REPORTED IN ASSOCIATION WITH DEVELOPED WORLD VESICO-VAGINAL FISTULAE

Hypothesis / aims of study

To review the incidence of ureteric involvement in association with VVF.

Study design, materials and methods

Ureteric obstruction has been reported in 25% of patients with post surgical vesicovaginal fistula (VVF) and ureteric fistula in 10%. We have reviewed a 2 surgeon series of VVF managed at a tertiary referral centre between 2004 and 2016 for the true incidence of ureteric injury in association with VVF.

Review of a prospective database for all patients with VVF of all patients with VVF from 2004.

Data on patient demographics, fistula aetiology, mode of repair and any associated ureteric injury and its treatment was noted.

Results

114 patients of median age 49 years (range 23 - 88) were referred with VVF during this period.

5 were secondary to radiotherapy (3 of which proceeded to primary diversion along with 1 obstetric VVF). (Note: 1 foreign body, 1 unknown aetiology). 4 VVF spontaneously resolved.

Ureteric involvement is far less common than previously reported and occurs in 4.3% (5/117) of VVF.

Presents as ureteric obstruction in 1.7% (2/117) and ureteric fistula in 2.6% (3/117)

The details of post surgical VVF patients are listed in Table 1.

The cases of ureteric injury are described in table 2.

Table 1: Approach of VVF repair.

	Vaginal repair	Abdominal repair (+stent and re-implantation)	Abdomino-vaginal repair	Total
No ureteric Injury	69	35	0	104
Ureteric Obstruction	0	1	1	2
Ureteric Fistula	0	3	0	3
Ureteric Drainage Re-established	NA	4	1	5

Table 2: The 5 cases of ureteric injury described

1	Vaginal hysterectomy leading to bilateral uretero-vaginal fistula and VVF (UVF)
2	Debulking of ovarian tumour with left ureter injury (Obstruction)
3	Emergency LSCS for placental abruption and injury to right distal ureter and bladder – with R VUJ obstruction/nephrostomy (Obstruction)
4	Bladder erosion from anterior prolapse mesh involving left UO (UVF)
5	TAH and BSO for ovarian cancer, left ureter divided (UVF)

Interpretation of results

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Presents as ureteric obstruction in 1.7% (2/117) and ureteric fistula in 2.6% (3/117)

Concluding message

Ureteric involvement is far less common than previously reported and occurs in 4.3% (5/114) of VVF.

It is successfully managed in all cases with ureteric reimplantation at time of VVF repair by abdominal route and is an absolute indication for abdominal repair of VVF.

References

1. Bodner-Adler, B., Hanzal, E., Pablik, E. et al.: Management of vesicovaginal fistulas (VVF) in women following benign gynaecologic surgery: A systematic review and meta-analysis. PLoS One, 12: e0171554, 2017

Disclosures

Funding: nil to disclose **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Ethics not required as this is a prospective surgical case series of VVF repair **Helsinki:** Yes **Informed Consent:** Yes