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PURPOSE AND BACKGROUND

- Long, complex, or recurrent ureteral strictures may require ileal ureter interposition, which remains an important reconstructive option.
- Reported long term success rate is 75-85%.
- We report on our 16 year institutional experience with ileal ureter interposition.

Author, Year	Description	% Bilateral	% Complications	Average fu months	% Succes	s Rate	D
Monn et al., 2018	Radiation cases	18.2	29.8	39.2	102/104	98%	Ana
Stein et al., 2009	Laparoscopic v. Open	14.3	35.7	30	14/14	100%	Ana
Chung et al., 2006	Long-term fu	3.5	28.6	72.4	54/56	96%	Ana
Matlaga et al., 2003	Contemporary series	11.1	16.6	18.6	18/18	100%	
Shokeir et al., 1995	Modified ileal ureter	0	unk	69	44/50	88%	Urin
Boxer et al., 1979	UCLA Series	0	unk	unk	72/89	81%	Uns

Table 1. Contemporary Series of Ileal Ureteral Interposition

MATERIALS AND METHODS

- Retrospective review of three surgeons' experience at a single institution's ureteral reconstruction database was performed (2003-2019).
- Unilateral strictures were treated with ipsilateral ileal interposition when possible. A "reverse 7" interposition was used for patients with bilateral strictures.
- Preoperative patient demographics, ureteral stricture characteristics, intraoperative variables, complications, and secondary procedures were recorded.
- Success rate was defined as no need for further intervention.



Reverse-Seven Configuration Figure 1. Armatys and Bihrle: J Urol 2009

Ileal Ureter Replacement for Complex Ureteral Reconstruction Has a High Success Rate at 3 Year Follow Up

finition of Failure

- stomotic stricture
- stomotic stricture
- stomotic stricture

ary obstruction uccessful operation



- required ileal ureter interposition (10 bilateral).
- Average age = 53 years, 44% male, 96% Caucasian, 11% Hispanic/Latino.
- including congenital and trauma (n=4; 9%).
- 23 patients (50%) had any complication (Clavien Dindo 1–5).
- At avg. of 3.3 year follow up 8 (17%) patients required additional open procedures.
- Of these, 5 underwent successful revision of the ileal ureter while 3 required Estimated Bloor nephrectomy due to persistent pain or chronic pyelonephritis.

Outco

- Stricture length Length of opera Length of Stay
- Successful outc

Table 2. Peri-operative and long-term outcomes after ileal ureter interposition

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RESULTS

Between 2003 and 2019, 188 ureteral reconstructions were performed, of which 46

• Stricture etiology: iatrogenic causes (n=24, 52%), radiation (n=12; 26%), vascular disease (n=3; 7%), idiopathic retroperitoneal fibrosis (n=3; 7%), and other causes

• Half (n=23) received prior intervention, all required prior stent or PCN.

• 11 (24%) patients had a major (Clavien Dindo 3a or greater) complication.

mes	Radiated (n=19) Mean	Non-Radiated (n=27) Mean	Total (n=46) Mean
n (cm)	11.22	7.77	9.13
ation (min)	452	372	412
d Loss (mL)	561	255	417
(days)	13.5	7.52	10
ome	89% (17)	78% (21)	83% (38)

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CONCLUSIONS

• In our long-term follow up of over 3 years, ileal ureter interposition is a successful option for complex ureteral strictures in properly selected patients.

Use of the "Care Everywhere" function in Epic allows long-term follow up of patients followed out-of-state.

Limitations of study include retrospective nature, and variable follow up intervals, although this is common at a tertiary referral center.

In this single-institution retrospective cohort, long-term outcomes at 4 years are comparable to the existing literature, with an 83% success rate in which no further open procedures are required.

Selected References

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