

REGIONAL URETHROPLASTY: THE VIABILITY OF DECENTRALISATION

There has been a shift towards management of urethral stricture via urethroplasty rather than repeated endoscopy given superior long-term benefit. Reconstruction is offered predominately in metropolitan areas, with few surgeons offering services in regional areas, leading to significant geographical disadvantage in rural populations. We here present data from a Society of Genitourinary Surgeon (GURS) Accredited Fellow practicing in a Regional Australian centre, to explore the feasibility in providing complex reconstruction in non-urban settings.

METHODS:

We analysed prospective data from 190 Genitourinary reconstructive procedures, identifying 117 Urethroplasties since establishment in 2017. 71 patients had reached 1y follow-up, representing 81 procedures from 2017-2020.

Anterior (68) and Posterior (3) repairs were analysed as distinct populations. Primary endpoint was stricture-free survival at 1y follow-up. Secondary endpoint was patient satisfaction as rated on validated Patient reported outcome measure (PROM) survey.

PROM:

Patient Reported Outcome Measure (PROM) Questionnaires have been verified as appropriate monitoring of qualitative impact of intervention. To reduce complexity and increase engagement. The final PROM featured only 3 questions for simplicity, with binary satisfaction or dissatisfaction with urinary function, sexual function, and quality of life recorded.

PROM data indicated 82% satisfaction with outcomes, with dissatisfaction primarily due to recurrence (10%) or unmasked detrusor failure (8%)



● Satisfied - No Recurrence
 ● Satisfied - Despite Recurrence
 ● Unsatisfied - No Recurrence
 ● Unsatisfied - Recurrence

RESULTS:

Of 68 Anterior urethroplasties, 54 were stricture-free at 1y, an initial success of 79%.

	Stricture-Free	New Recurrence	Success
Post-Op TOV	68	0	100%
3 months	62	6	91%
6 Months	60	2	88%
12 Months	54	6	79%

Of 3 posterior Urethroplasties, 1 patient had recurrence at 1y, requiring re-do Urethroplasty.

RE-DO:

Of 14 recurrences, 6 proceeded to re-do Urethroplasty, with 93% subsequently stricture free at 1y.



In total, 59/68 patients became stricture free, an overall success rate of 85%.

85% SUCCESS

Date-
Patient name-
Time since surgery

Following your procedure,

Are you happy with your overall urinary flow?
Yes No

Are you happy with your overall sexual function?
Yes No

Are you happy with your overall quality of life?
Yes No

Ong M, Duncan C, McGrail M, Desai DJ. 'Evaluation of patient reported outcome measures post urethroplasty: Piloting a "Trifecta" approach.' World J Clin Urol 2020

DISCUSSION:

It is commonly accepted that anterior urethroplasty has an 85% success rate, though a recent 2021 Meta-analysis of Australian data found only 45-63% of Anterior repairs were stricture-free at 15y. Posterior urethroplasty has a higher success rate, often found to be >90%. Our data supports that similar outcomes can be achieved in regional centres, given adequate training and resources.

CONCLUSION

Competitive success rate of 85% can be achieved in adequately resourced regional areas, with decentralisation of reconstructive Urology a feasible avenue in reducing geographical barriers to definitive surgical intervention.