Hypothesis / aims of study
Phalloplasty using a radial forearm flap (RFF) in the female to male (FTM) transgender population is a complex surgery with a reported rate of urologic complications up to 41%. Complications such as fistula and stricture of significant length can be managed by adapting conventional urethroplasty. We present a case series of such urethroplasties.

Study design, materials and methods
We analyzed the treatment of all patients undergoing buccal mucosal graft urethroplasty for urethral complications of FTM RFF phalloplasty at a single site over a 15-month period; January 2015 to March 2016. All the surgeries were performed by a single reconstructive urologic surgeon.

Results
A total of 7 patients undergoing 8 urethroplasties were included in this series. Mean age was 35 years old (±9 years). Mean time between the initial phalloplasty and the diagnosis of the first neourethral stricture was 12 weeks (±8 weeks). Two of the strictures were limited to the neourethra, while 5 involved the native urethra-neourethra anastomosis. Three patients underwent a single stage urethroplasty and five have undergone the first stage of a 2-stage urethroplasty. A buccal mucosal graft was placed to augment the neo-urethra in 4 patients. The early post-operative course was uncomplicated for all patients.

At median follow up of 11 weeks (±8 weeks), 3 patients developed a recurrent stricture. Two of these patients had undergone a single stage urethroplasty (66% recurrence rate) and one had undergone the first stage of a two-stage urethroplasty (20% recurrence rate). One of these patients went on to have a two-stage urethroplasty to repair the recurrent stricture and the other two were treated with laser incision and dilation.

Interpretation of results
Two-stage urethroplasty appears to be a viable option to repair urethral stricture and fistula in patients who have undergone radial forearm flap phalloplasty.

Concluding message
Common urologic complications following phalloplasty include fistula and stricture development. Limited data exists around its management and we demonstrate our approach.

Disclosures
Funding: None Clinical Trial: No Subjects: HUMAN Ethics not Req’d: Retrospective, case series, no research interventions, quality improvement study. Helsinki: Yes Informed Consent: No