

## Introduction

- Transmasculine gender affirmation surgery is commonly associated with urinary complications
- Inadequate vaginal de-epithelialization combined with a distal obstruction may increase risk of a vaginal cavity remnant due to pressurized urine breaking through suture lines

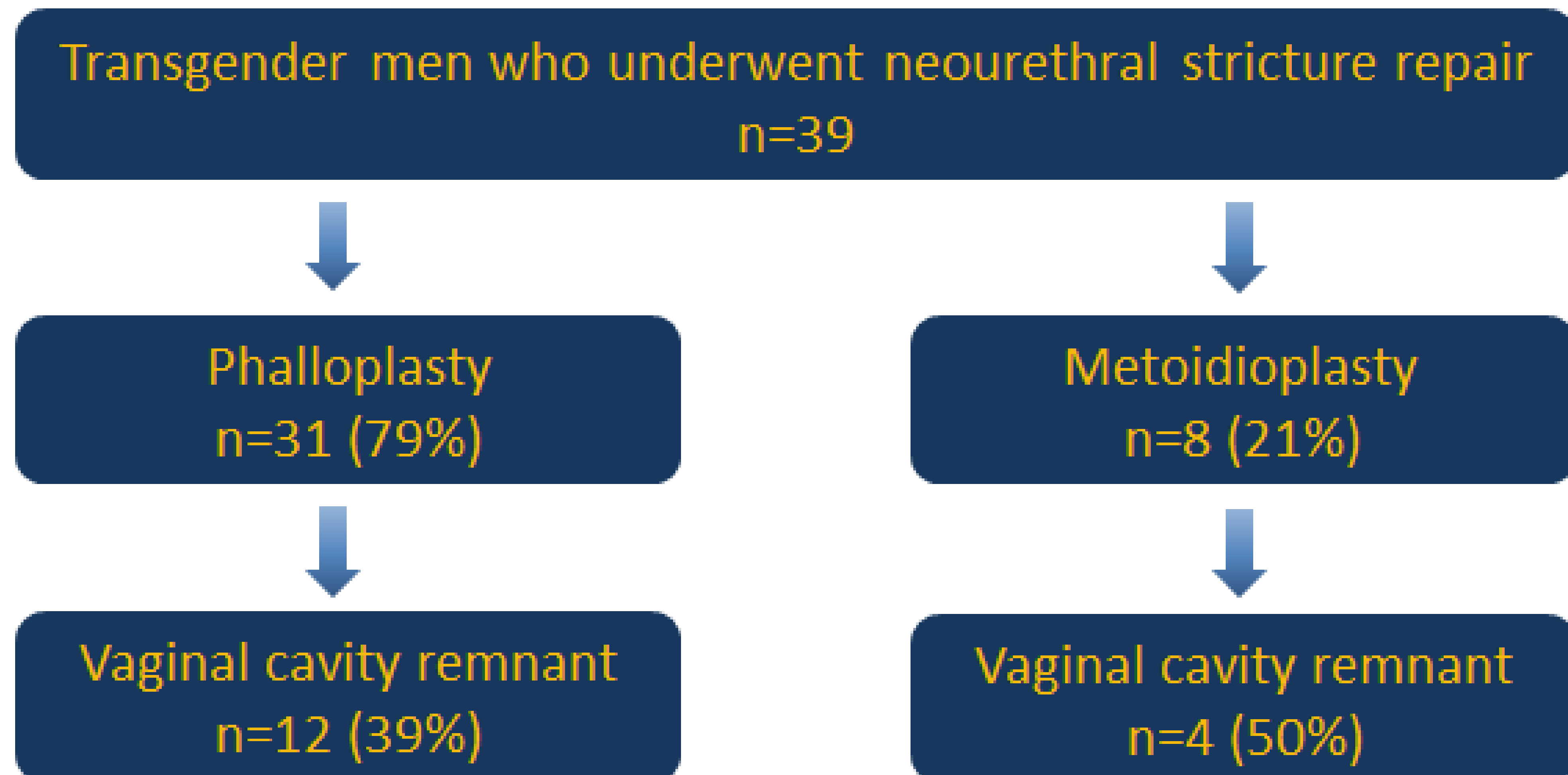
## Objective

- To determine the prevalence of patients who require cavity re-excision and obliteration during neourethral stricture repair
- To determine the histological composition of the excised tissue

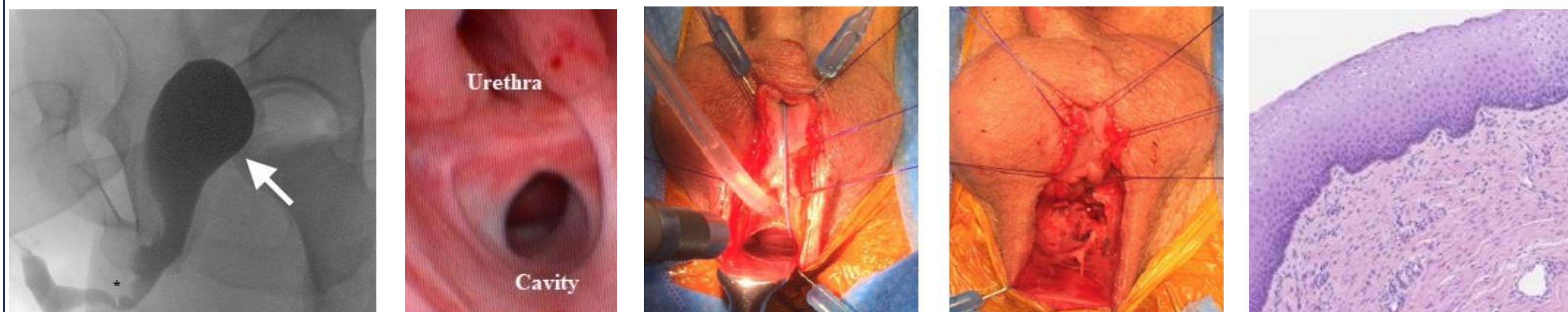
## Methods

- Retrospective review of all transgender patients who underwent neourethral stricture repair from 1/2014-10/2019

## Results



Overall 16/39 (41%) patients were found to have vaginal cavity remnants  
15/39 (38%) patients underwent re-excision and re-obliteration during stricture repair  
(1 patient planning for re-excision and re-obliteration during second stage urethroplasty)



Preoperative RUG and VCUg demonstrating a stricture (\*) and vaginal cavity remnant (arrow) in a patient following phalloplasty

Endoscopic view of urethra with vaginal cavity remnant inferiorly

Intraoperative image of remnant vaginal cavity discovered during neourethral stricture repair

Intraoperative image of obliterated vaginal cavity following re-do vaginectomy

Histological image showing presence of vaginal epithelium in excised vaginal cavity remnant

## Results

Pathology (n=15)

- Vaginal epithelium (n=15)
- Chronic inflammation (n=11)
- Fibrosis (n=8)
- Granulation tissue (n=2)
- Microabscesses (n=1)
- Calcification (n=1)
- Multinucleated Giant Cells (n=1)

## Conclusions

- A high percentage of transgender men with neourethral strictures present with vaginal cavity remnants
- All specimens contain vaginal epithelium
- Total removal of vaginal tissue primarily or during reconstruction is important
- Implications of residual vaginal epithelium requires further investigation