DEFINITION:
In males, urethral stricture is defined as a narrowed segment of the urethra due to a process of fibrosis and cicatrisation of the mucosa and surrounding tissue. Meatal stenosis is generally accepted as a short distal narrowing at the meatus, without involvement of the fossa navicularis. Female urethral stricture is defined as a ‘fixed anatomical narrowing’ causing reduced urethral calibre. Majority of series define a urethral calibre < 14 Fr as diagnostic for female stricture.

EPIDEMIOLOGY:
In males, mean age is 45 years old. The anterior urethra is most frequently affected (92.2%), in particular the bulb urethra. In females, the incidence increases over 64 years old and a true stricture occurs in only 0.08-5.4% of women with refractory LUTS. In children, most strictures are traumatic: iatrogenic causes or external trauma. In female-to-male transgender patients, approximately 51% will suffer a urethral stricture. Strictures in male-to-female transgender patients occur in 14.4% of cases and arise almost exclusively at the neo-meatus.

AETIOLOGY AND PREVENTION:
1. Sexually transmitted infections: Urethritis due to sexually transmitted infection in particular gonorrhoea, was previously a major cause of urethral strictures in well-resourced countries accounting for 40% of all cases.
2. Inflammation: Lichen sclerosus involves the urethra in 20% of cases and is the most common cause of panurethral stricture disease (48.6%).
3. External urethral trauma: The second most common cause of stricture formation in adults.
4. Iatrogenic urethral injury: One of the most common causes of strictures in well-resourced countries. Preventing iatrogenic urethral injury represents the main way in which urologists can prevent urethral strictures.
5. Others: failed hypospadias repair, congenital or idiopathic.

The cause of female urethral stricture is idiopathic in 48.5% and iatrogenic in 24.1%. Radiation therapy and infections are rare causes. The commonest segment of urethra affected is the mid- or mid-to-distal (58%), Panurethral strictures are rare (4%).

CLASSIFICATION:
Classification according to stricture location will affect further management.

The male urethra is divided into:
- Anterior urethra (surrounded by spongious tissue): meatus, penile urethra and bulb urethra.
- Posterior urethra: membranous urethra, prostatic urethra and bladder neck.

The female urethra is approximately 4 cm long and arbitrarily divided in an upper, mid and lower part.

DIAGNOSTIC EVALUATION:
History taking and physical examination are key in diagnosis.