

Supplementary Table 1: Definitions of urethral complications cited in analysed articles.

Definition
'(...) overall rate of complications such as infection of urinary tract, lithiasis, damage to the upper urinary tract, (pyelonephritis, dilatation) and urethral tolerance was evaluated during the period of CIC' ¹⁷
'Urethral complications, such as strictures and false passages' ¹⁸
'The complications of clean intermittent catheterization are rare but include microscopic and gross hematuria, urethral trauma with creation of false passages, urethritis, urethral strictures and pain' ⁵⁵
'Urethral complications (specified as acute or long term, and type of complication such as pain, haematuria, inflammation, stricture, via falsa, sticking of catheter and other difficulties in catheterization' ⁴⁹
'Intermittent catheterization continue to have problems with urinary tract infection and traumatic complications. Repeat catheterization causes mechanical damage to the urethral wall and local trauma induces urethritis, cystitis and other complications' ⁵⁶
'Patients may suffer from urinary complications following standard catheterization (e.g. urinary tract infection [UTI] and/or traumatic dysuria or haematuria), thereby increasing patient withdrawal' ²³
'Complications in terms of symptomatic UTIs and hematuria' ³²
'The most frequent complication of IC is UTI, primarily prevented by regular emptying to avoid distension and vesico-ureteral reflux. Prostatitis, epididymo-orchitis, and urethritis are less frequent complications; occasional urethral trauma has also been reported'; 'intermittent catheterization has fewer complications, particularly recurrent urinary tract infection (UTI) and bladder calculi' ³⁴
'Complications: prostatitis, urethral bleeding, positive urine test' ⁵⁹
'UTIs are the most frequent complication in patients performing CISC' ³⁵
'Among the most common urinary catheter complications are: anaphylaxis (allergic reaction to latex), cytotoxicity and hypersensitivity, symptomatic bacterial infection, catheter blockage (due to calculi and encrustations), catheter fracture and malignancy, hematuria (blood in urine), intravesical knotting, inflammation (due to pyelonephritis and epididymitis), erosion and periurethral abscess, mechanical trauma (partial damage, perforation and urinary leakage), urethral fistulae, urethral stenosis and stricture, and urosepsis' ³⁷
'Urethral complications of any type, whether they are strictures, false passages, urethritis, or any other complication that could result from urethral trauma' ⁵⁰
'Among urethral complications, we classically distinguish urethral bleeding, false passage, and urethral strictures. Urethral bleeding episodes are frequent, affecting as many as one-third of patients under long-term intermittent catheterization, mainly males. Urethral strictures constitute a real challenge in this specific population, because the continuation of intermittent catheterization is difficult, which can therefore significantly affect bladder management. False passages are also considered classical complications and often occur in case of urethral stricture, bladder-sphincter dyssynergia and enlarged prostate' ⁴⁰
'Complications of CIC can include urethral false passage, urethral strictures, gross hematuria, and recurrent urinary tract infections (UTIs)' ²⁷
'Short-term complications associated with traumatic UC are well described, and include acute urinary retention, urosepsis, bleeding and acute kidney injury' ²⁸
'Complications, including bladder stones, urinary tract infection (UTI), and decreased bladder capacity, in comparison to intermittent catheters,' 'potential complications including epididymitis, strictures, and bladder stones,' 'complications such as UTIs and haematuria' ⁴³
'The prevalence of complications can be decreased by adequate patient education, use of non-traumatizing techniques and adequate precautions to prevent infections' ⁴⁴
'Our search revealed a variety of potential complications associated with IC . These included UTI, urethral strictures, hematuria, bladder stones, false urethral passage, pain or discomfort, and renal scarring' ⁴⁵
'Frequent complications are urinary tract infection (UTI), urethral trauma and discomfort during catheter use,' 'Other complications (besides UTIs) include prostatitis, epididymitis, urethritis, urethral strictures, and false passage. Urethral irritation, measured by haematuria, is reported particularly when intermittent catheterization starts but is not reported as being long-lasting' ⁴⁷
'Complications Associated with Catheterization: bacteriuria, catheter-associated biofilm, encrustations, urosepsis, Urethral Damage, Catheter-Associated Urinary Tract Infection', 'Urethral complications include the following conditions: (a) tearing of the urethra; (b) developing urethral fistulas; (c) inflammation in the urethral meatus; (d) bladder inflammation by scrotal abscesses; (e) epididymitis; (f) bladder stones; (g) bladder cancer; and (h) catheter expulsion' ⁴⁸
'There are many problems associated with catheters that can occur during short or long-term use. These include discomfort, blockage, infection, haematuria, trauma to the urethra, prostate or bladder, and expulsion as a result of weak pelvic floor muscles.' ³³