

# 11. Urinary diseases

Authors: Angela Koutsokera, Roberto Bullani

## 1. INTRODUCTION

- **Stress urinary incontinence** is the most common form of incontinence in CF. It usually occurs during physical exertion, such as lifting, laughing or coughing.
- Its **prevalence** in CF is difficult to estimate due to under-reporting.
  - Increased prevalence in female CF patients (30-78.8%) as compared to the general population (8.5-35%). Prevalence increases with age and parity.
  - Lower prevalence in male CF patients (5-13%).
  - In some cases fecal incontinence may be present.

## 2. RISK FACTORS AND MECHANISMS OF URINARY INCONTINENCE IN CF (TABLE 1)

**Table 1:** Risk factors and possible mechanisms of urinary incontinence in CF

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Female gender

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Older age

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Malnutrition and peripheral muscular weakness

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Anatomical and pressure transmission abnormalities of the pelvic floor

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Increased intra-abdominal pressure (associated to chronic coughing)

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Constipation and fecal impaction

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Pregnancy and vaginal birth

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## 3. CLINICAL CONSIDERATIONS:

- Patients may not report incontinence spontaneously, possibly due to embarrassment.
- The emotional impact and the effects on lifestyle and social functioning may vary depending on the severity of incontinence.
- Incontinence may be aggravated by coughing and may have a negative impact on chest physiotherapy.
- Although often ignored, **the presence, the severity and the impact of incontinence should be a part of the clinical assessment.**

#### 4. MANAGEMENT:

- Referral to a specialist (urologist or gynecologist) may be indicated.
- Although evidence of efficacy is not compelling, pelvic floor muscle exercises (PFME) are often the first therapeutic intervention. They target to improve the strength, endurance and coordination of pelvic floor muscles (**See also Chapter “Physiotherapy”**).

#### 5. REFERENCES

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