

## THE PREVALENCE AND SEVERITY OF SYMPTOMS OF INCONTINENCE IN ADULT WOMEN WITH CHRONIC LUNG DISEASE

### Aims of Study

The prevalence and risk factors for urinary incontinence in the general population of adult women have been investigated (1,2,3). Prevalence figures are available for different age groups and in one study vary between a prevalence of 13% for young women age 18-24 years to 35% in a 70-75 year group (1). Faecal urgency and soiling has been recently reported for the normal adult population as 4% and 9% respectively (4). The prevalence of urinary incontinence in adult women with Cystic Fibrosis (CF) has only recently been reported (5,6) and varies between 36% and 64%, being higher in older women and those with poorer lung function. The only published study measuring the prevalence of urinary incontinence in women with Chronic Obstructive Pulmonary Disease (COPD) reported a prevalence of 66% (8). The aim of this project was to estimate the prevalence and severity of, and risk factors (other than coughing) for lower urinary tract symptoms, defaecation difficulty, anal incontinence and urogenital prolapse in adult women with Cystic Fibrosis and Chronic Obstructive Pulmonary Disease, and examine differences between these two groups.

### Methods

Fifty women with CF, and 68 women with COPD were recruited from a hospital CF and Respiratory Unit databases, to take part in a postal questionnaire survey. This consisted of 28 questions about incidence, severity and bother of incontinence, both bladder and bowel "in the last 12 months/one month/2 weeks"- time frames chosen to compare with the prevalence data in comparable studies (1,2,3). Questions regarding hormonal status, menstrual cycle, fluid intake, diet, concomitant medical history and medication were also included. Questions were framed according to the ICS recommendations. Initially descriptive statistics were calculated then results from continuous variables were analysed by using t tests and nominal data analysed by chi-squared tests using a statistical software package. Data analysis will be completed by May.

### Results

To date 16 CF and 10 COPD questionnaires have been completed. Overall, 52.2% of respondents reported "trouble with the bladder" and 34.4% of respondents reported "trouble with the bowel" at some stage in the last 12 months. 43.5% reported symptoms of SUI only, 4.4% had urge incontinence only, 13% mixed stress and urge incontinence (in total 60.8% of respondents). 8.7% reported nocturnal enuresis, 4.3% insensible urine loss, 17.4% voiding dysfunction and 30.4% urinary urgency. Despite these higher than normal figures, 56.5% women reported these symptoms interfered with their lives "not at all", 17.4% "a little" and 26.1% "somewhat". Faecal incontinence was reported by 13% of women, 30.4% reported faecal urgency, 26% defaecation difficulty. "Bothersome" urogenital prolapse was reported by 17.4%. Figures separated for the 2 aetiologies reveal-bowel symptoms occurred more frequently in the CF women (40% compared to 28.6%), while urinary loss (71.4% compared to 40%) and prolapse symptoms (42.9% compared to 6.7%) were reported more by COPD women. Nocturnal enuresis occurred only in CF women (13.3%), voiding difficulties only in COPD women (42.9%), whereas defaecation difficulties were more frequent in CF women (33.3% compared to 14.3%). More COPD women reported the more severe category of "somewhat" bothered by symptoms (75% compared to 40%).

### Conclusions

1. There is a higher prevalence of lower urinary tract and bowel symptoms in women with chronic lung disease than the normal female population.
2. Quality of life responses showed that these women generally accept their symptoms.
3. General questioning results in under reporting. More specific questioning reveals higher prevalence.
4. Symptoms of faecal urgency, faecal soiling and defaecation difficulty are prevalent in the young nulliparous cohort of CF women possibly explained by the gastro-intestinal involvement of their disease.
5. The surprisingly high prevalence of nocturnal enuresis in the CF cohort needs further investigation. Further research is underway to elucidate these conclusions.

## **References**

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