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MENTAL HEALTH AND THE OVERACTIVE BLADDER REVISITED

Hypothesis/aims of study

The association between psychological morbidity and lower urinary tract symptoms (LUTS) is well documented. However, neither a definitive causal nor co-incidental relationship has been proven. Any chronic illness including urinary incontinence is associated with increased psychological morbidity. Given that symptoms of overactive bladder (OAB) and psychological problems are common, it is not unusual for them to co-exist. However, whether improvement in LUTS is accompanied by improvement in mental health is unknown.

The aim of this study was to investigate the prevalence of psychological morbidity in women receiving treatment for OAB, and whether long term treatment of OAB was associated with improvement in psychological symptoms and self esteem.

Study design, materials and methods

Women with symptoms of idiopathic OAB referred from primary care to 2 tertiary referral Urogynaecology centres were recruited into a prospective study investigating the management of OAB in clinical practice. Treatment naïve patients and those women who had previously sought treatment for OAB were included in the study. Women with a diagnosis of depression or anxiety disorders were also included in the study; however patients with dementia and cognitive impairment who would be unable to understand and complete the study questionnaires were excluded.

Patients were recruited into the study between May 2006 and August 2007. All patients were given verbal and written information about the treatment of OAB. Demographic data was collected from all patients. After a baseline and 6 week visit, patients were invited for follow-up at 3 monthly intervals for a minimum of 12 months; and asked to complete the 3 self-completion questionnaires; the Hospital anxiety and depression scale (HADS), Rosenberg self esteem scale (SES) and the Patient perception of bladder condition scale (PPBC) at each study visit. Routinely patients are followed up in our clinical practice at these time intervals.

The HADS is an extensively used screening questionnaire for clinical anxiety, mood disorder and depression (range of scores 0-21) (1). The SES is a 10-item measure of global self-esteem which is scored on a continuous scale whereby a higher score indicates greater self-esteem (range of scores 0-30). The PPBC is a single item global scale which asks patients' to rate their bladder symptoms on a 6 point scale (range of scores 1-6).

Non-parametric tests were used to investigate the relationship between psychological symptoms and symptoms of OAB. Data were analysed using SPSS version 17.

Results

251 women consented to take part in the study, of which 133 patients (53%) completed 12 months follow-up and 68 patients (27%) completed a further 12 month follow-up at the time of reporting this study. 11 patients (4%) did not complete a baseline assessment, and 107 patients (43%) dropped out of the study within 6 months. Commonly cited reasons for non-completion of the study were withdrawal of consent for participation, resolution of symptoms, poor treatment efficacy and tolerability. Data from patients who completed a minimum of 12 months follow-up were used in this analysis.

The mean age of participants was 55 years (range 20-87 years). All patients received advice about behavioural treatments for OAB and 96% of patients were prescribed antimuscarinic medication.

10 women (8%) had a diagnosed psychological illness at baseline. There was no significant difference in baseline PPBC and SES scores between patients with a diagnosed psychological illness and those without. However patients with a diagnosed psychological condition scored significantly higher anxiety and depression scores on the HADS compared with women without a diagnosed psychological illness at baseline ($P<0.05$). At the end of the study, women without psychological illness reported lower severity of OAB than women with known psychological illness. Persistence with antimuscarinic medication was significantly better in women without known psychological illness at 23 weeks compared with women with diagnosed psychological illness whose mean persistence with medication was 9.5 weeks.

For the remainder of the analysis, questionnaire results from women with known psychological morbidity were excluded.

At baseline, 68% of patients screened positive for symptoms of depression and 69% for anxiety. 58% of patients had symptoms of both anxiety and depression. Mean persistence with medication was 20 weeks in women with significant symptoms of anxiety and depression and 21.5 weeks in women with no psychological symptoms.

Severity of OAB symptoms assessed using the single item PPBC questionnaire was compared with baseline and follow-up HADS scores. Patients who reported less severe OAB symptom also reported lower anxiety scores. At the end of the follow up period symptoms of OAB were significantly lower in women reporting no or mild symptoms of depression.

Improvement in HADS anxiety scores was not statistically significant over the 2 year follow-up period. However, there was a statistically significant improvement in symptoms of depression ($P<0.05$).

The range of scores for the SES is 0-30; a higher score indicating greater self esteem. The mean SES score for all patients was 16 at baseline, and there was no significant change in this score at one and two year follow-up. Spearman's correlations between baseline HADS and SES scores showed a negative relationship between mental health symptoms and self esteem.

Interpretation of results

The prevalence of previously diagnosed psychological morbidity in this study population was 10%. 58% of patients had significant symptoms of both anxiety and depression. Self esteem remained stable over the follow up period, with no significant difference in SES scores between women with and without psychological symptoms. Treatment of OAB was associated with improvement in LUTS and depression.

Concluding message

The prevalence of mixed anxiety and depression in the UK is 9% (2). The prevalence of psychological symptoms identified using the HADS in a population of female patients with OAB attending 2 Urogynaecology outpatients was higher than would be expected in the general population.

Long-term treatment of OAB was associated with significant improvement in LUTS and symptoms of depression. Self esteem remained stable over the study period. Symptoms of anxiety were unaffected by treatment of OAB. Anxiety is a symptom which is common to both OAB and psychological illness. Many of the anxiety items on the HADS describe symptoms that women with urgency will commonly experience. The HADS therefore, may not clearly distinguish between anxiety associated with urgency and psychological morbidity.

References

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Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**