

THE EFFECT OF ETHNIC ORIGIN ON COMPLIANCE AND OUTCOME AFTER CONSERVATIVE TREATMENT OF URINARY INCONTINENCE

Hypothesis / aims of study

The influence of ethnic origin on health in general, and incontinence in particular, is only poorly understood. It is well established that patients of Asian Indian origin are more prone to type II diabetes and renal disease. Among incontinent patients, African American women are more likely to suffer from detrusor overactivity than Caucasians, and it is also now established that Asian Indian women appear to be more likely to have detrusor overactivity. However, there are few data examining the hypothesis that ethnic origin may influence compliance with treatment or treatment outcome.

Study design, materials and methods

Our unit is based in a city with a high proportion (50%) of Indian Asians. A retrospective study was performed. Case notes of women who had been attended the nurse led continence clinic between 2002 to 2003 were reviewed. Ethnic origin was ascertained from the notes, confirmation with the patient, or name review. Demographic data, medical & surgical history, urodynamic diagnosis, treatment plan and outcome were extracted from the casenotes. Data are presented as number (%) or median (range). Non-parametric tests and Chi square were used for comparisons as appropriate.

Results

349 casenotes were reviewed. 306 patients (86%) were Caucasian, 37 (10%) were Indian Asian, 6 (2%) were from other ethnic groups and in 7 notes (2%) ethnic origin could not be ascertained. The study was limited to the 343 Caucasian and Asian patients, in view of the low numbers of other ethnic groups. The proportion of Asian patients seen was significantly lower than the proportion in the community served by the hospital (difference 39%; 95% CI 32;46). Median age of the Caucasians was 53 years (17-91), and of the Asians 52 (22-81) (not significant). Median parity was 2 (0-5) in each group. 60% of each group were postmenopausal and 78% of women were not taking hormone replacement therapy (no difference between groups). 25% of patients had undergone hysterectomy, 12% of Caucasians and 5% of Asians had undergone continence surgery (no difference), and similar proportions of women had undergone prolapse surgery.

118 women (34%) had urodynamic stress incontinence (USI), 40 women (12%) had detrusor overactivity (DO), 35 women (10%) had both DO and USI; 69 women (20%) had a rise in detrusor pressure during filling (low compliance). There were no differences in diagnosis between the ethnic groups.

All patients were treated with a package of care which included fluid and dietary advice (162 patients, 47%), training in pelvic floor exercises (337 patients, 98%) and bladder drill (62 patients, 18%), and the administration of anticholinergic medication for patients with DO if these simple measures did not provide an improvement (66 patients, 19%). 26 patients (8%) were taught self-catheterisation. There were no differences in treatments offered by ethnic group.

Following treatment, 34 patients (10%) failed to attend for review; 43 patients (13%) were cured, and 49 patients (15%) were improved and discharged from the clinic. 54 patients (16%) were discharged with no reported improvement, and 82 patients (24%) were referred to Consultant led clinics for further management. 81 patients were referred for electrical stimulation. There were no differences in the outcomes of Caucasians compared to Asians.

Interpretation of results

The nurse led clinic is an effective intervention, allowing about a third of patients to be managed without referral to Consultant led care. Our data have demonstrated that ethnic origin did not influence the presentation of incontinence to the nurse led clinic, nor did it affect the likelihood of a positive response to treatment.

However, the proportion of women of Asian Indian origin attending the service was significantly less than expected, based upon the population served by the hospital, which

raises the possibility that significant numbers of incontinent patients are not making use of the service.

Concluding message

Asian Indian ethnic origin does not appear to affect the likelihood of cure after conservative treatment of urinary incontinence. It is possible that the service is not being utilised by significant numbers of women from this ethnic group.