

## URINARY INCONTINENCE IN WOMEN WITH BENIGN JOINT HYPERMOBILITY SYNDROME: IMPACT ON QUALITY OF LIFE

### Hypothesis / aims of study

Urinary Incontinence is a common condition adversely affecting quality of life (QoL) (1). The causes of incontinence are multifactorial. It has also been suggested that genetic or intrinsic differences in connective tissues may predispose individuals toward pelvic organ prolapse and urinary incontinence. The high collagen content in the musculotendinous pelvic floor may be affected by connective tissue disorders contributing to incontinence. Benign joint hypermobility syndrome (BJHS) – previously called Ehlers Danlos type-III, is a hereditary connective tissue disorder which causes laxity of ligaments resulting in a range of joint movement exceeding that which is considered normal (2). This condition affects and affects 4-13% of the population. In patients with BJHS, the ratio of type-III collagen to type-I + type-III is increased which gives rise to increased tissue laxity. BJHS primarily affects the musculoskeletal system and is usually associated with joint pain and instability. It may also affect other systems including the gastrointestinal system and the female genital system. Previous studies have shown that the prevalence of both urinary and faecal incontinence is higher in these women.

The aim of this study was to further investigate and determine the prevalence of urinary incontinence in women with benign joint hypermobility syndrome (BJHS).

### Study design, materials and methods

This was a prospective case series of women with BJHS who were recruited from one of the two BJHS tertiary referral centres in the United Kingdom. All patients fulfilled the Revised 1988 Brighton Criteria which represents a set of major and minor criteria including the Beighton Hypermobility Score (2). Basic demographic details included age, parity, mode of delivery and menopausal status. Patients were interviewed and asked to complete the King's health Questionnaire (KHQ) - a validated and reliable method of assessing QoL in relation to urinary symptoms. A higher KHQ score denotes a greater impairment in QoL. Ethical approval was obtained from the local research and ethics committee.

### Results

Sixty-two women were recruited with a mean age of 41 years (range 18-62) and (8/62) 12.9% of the participants were postmenopausal. 33/62 (53%) of participants were nulliparous. Lower urinary tract symptoms were present in 93.5% (57/62) of patients. 64.5% (40/62) had urinary incontinence where stress urinary incontinence was more common. On analysing the KHQ, the following results are seen in Table 1:

### Interpretation of results

<b>KHQ Domains</b>	<b>Mean Score</b>
General Health Perception	44.7
Incontinence Impact	34.9
Role limitations	17.4
Physical Limitations	21.5
Social limitations	13.5
Personal relationships	1.9
Emotions	8.7
Sleep/energy	24.3
Severity measures	26.4

**Table 1** King's Health Questionnaire domain scores

The results show that patients perceive their general health to be poor but their incontinence seems to have minimal impact on their QoL, than those women seen in a urogynaecology clinic (1).

### Concluding message

These patients have a poor overall QoL but this is probably due to BJHS. We hypothesise that they do not perceive their incontinence to have a damaging impact on their already poor general health (3).

### References

1. Br J Obste Gynaecol 1997; 104(12):1374-1379
2. J Rheumatol 27(7):1777-1779, 2000
3. Neurourol urodyn 2009; 28(8): 986-9

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<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>South East London REC 3</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>