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# URINARY RETENTION IN ELDERLY WOMEN DUE TO LUMBAR SPONDYLOSIS; A REAPPRAISAL

## Hypothesis / aims of study

Urinary retention in elderly women is a rare condition that both Urologists and Geriatricians may encounter [1]. We performed uro-neurological assessment in women with retention due to lumbar spondylosis (LS), a common spinal disorder in the elderly.

## Study design, materials and methods

During the past 3 years we had 5 such women with retention (post-void residuals >100 ml; mean volume, 308 ml, range 120-600 ml) and typical MRI features of LS (L4/5 in 3, L3/4 in one, L2/3 and 4/5 in one)(Fig 1). Their mean age was 71 years, range 60-79 years. Uro-neurological assessment comprised neurological examination, electromyography (EMG)-cystometry and motor unit potential (MUP) analysis of the sphincter and lower extremity (LE) muscles.

## Results

The patients were suffering from LS with mean duration of 6.5 years, range 1 month-20 years. At their onset 4 patients presented with sciatica, low-back pain and intermittent claudication, followed by lower urinary tract dysfunction including voiding difficulty in 4 and urinary incontinence in 2. However, in one patient, painless urinary retention appeared as the sole initial symptom. Neurological examination showed mild LE weakness in 2, decrease/absence of LE reflexes in 5, and decreased superficial sensation in the saddle area (L5 to S4) in 3. In one patient, absent ankle reflexes were the sole neurological abnormalities, without evidence of distal neuropathy on nerve conduction study. Neurogenic change in the LE-MUPs was noted in all 3 patients studied. EMG-cystometry revealed low compliance detrusor in one, bladder sensory impairment in 3 (filling phase); detrusor areflexia in 5 (Fig 2), detrusor-sphincter dyssynergia in 2 (voiding phase); bethanechol supersensitivity of the detrusor in one, neurogenic change in the sphincter MUPs in 2 (Fig 3). Two patients underwent surgical decompression of the cauda equina, with improvement of retention in one.

## Concluding message

As its clinical importance has been suggested previously [2,3,4], spinal MRI and uro-neurological assessment could reveal urinary retention in elderly women due to LS. This disorder may present with urinary retention as the sole initial complaint and have no other obvious neurological abnormalities.

## References

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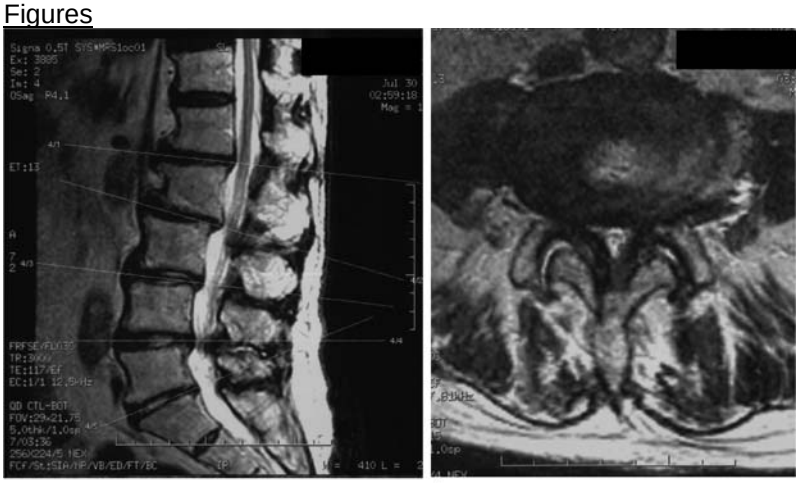
4Hellstrom PA, Tammela TLJ, Niinimaki TJ. Voiding dysfunction and urodynamic findings in patients with lumbar spinal stenosis and the effect of decompressive laminectomy. Scand J Urol Nephrol 1995; 29: 167-171.

Figures



a. b.

Figure 1

MRI imaging

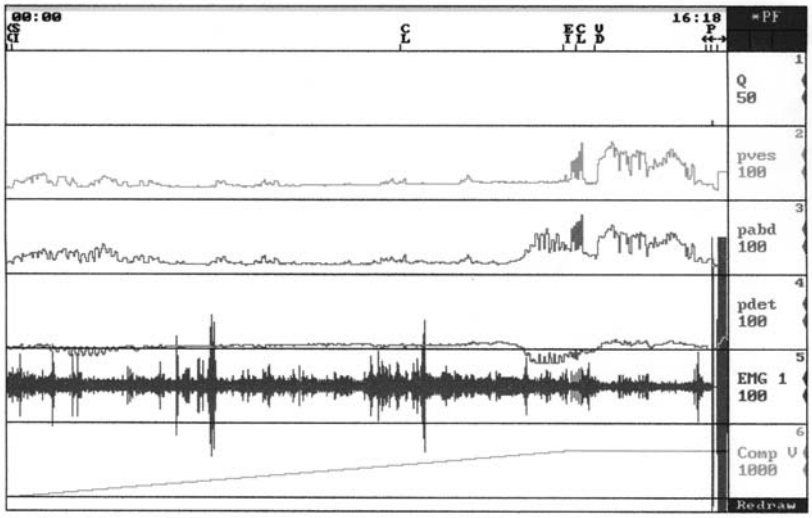



Figure 2

Cystometry.

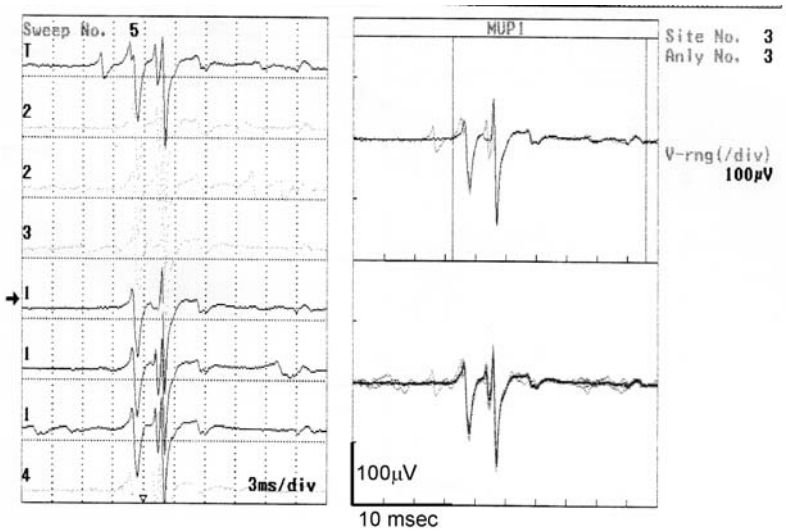



Figure 3

Sphincter EMG.