

ELECTROMYOGRAPHY OF THE EXTERNAL URETHRAL SPHINCTER IN PREMENOPAUSAL WOMEN WITH NO URINARY SYMPTOMS.

Hypothesis / aims of study

The Electromyographic (EMG) abnormalities of complex repetitive discharges and decelerating bursts have been described from the urethral sphincters of females with urinary retention. Ten years ago we presented a study of 20 normal women in which 7 (35%) demonstrated these findings, questioning the significance of these findings in relation to female urinary retention [1]. We now present follow up of these women 10 years after the original study.

Study design, materials and methods

When initially recruited for external urethral sphincter electromyography, all volunteers had normal menstrual cycles and underwent normal uroflowmetry and low post micturition volumes. We contacted these women 10 years later and they completed a verbal questionnaire concerning urinary symptoms in order to determine if they have developed urinary dysfunction.

Results

19 of the original 20 women who participated in the study were contacted, including all 7 of the 20 volunteers that were found to have widespread complex repetitive discharges and decelerating bursts in the striated urethra sphincter. None of the nineteen women had experienced urinary retention or voiding difficulties. Two of seven with positive EMGs had experienced an occasional urinary tract infection. Two of 12 with negative EMGs had experienced stress urinary leakage and feeling of incomplete emptying, but this had followed childbirth in one female and the diagnosis of endometriosis in the other.

Interpretation of results

No women in our study with the positive urethral EMG findings of complex repetitive discharges and decelerating bursts developed voiding difficulties. This suggests that these findings may be a normal variant and a more complex situation may exist in the urethral sphincters of some females that leads to urinary retention.

Concluding message

There may be no relation between the urethral EMG findings of repetitive discharges and decelerating bursts and urinary retention or, more likely, a specific quality or distribution of these findings may lead to Fowler's Syndrome.

References

1. Kujawa ML et al. (2001). Are 'whaling' women normal? BJU I; s1, 1-83.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Manchester
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes