

Hagen et al, 2009 Abstract

Using EMG To Assess Quality Of Life Issues After Vulval Cancer Surgery

Objective

Surgical intervention for vulvar cancer and vulvar intraepithelial neoplasia causes mutilation of the genital area and can impose significant bladder, bowel and sexual dysfunction. The case report outlined how conservative interventions such as pelvic floor muscle training (PFMT) may reduce the long-term morbidities of such dysfunction.

Results

An increase in pelvic floor muscle strength and endurance were recorded using **electromyography (EMG)**. Improved bladder control was demonstrated by a reduction in frequency of voiding (from 15 to seven per 24 hours), and number of pads used (from six to three per 24 hours) was evident.

The impact of urinary incontinence on everyday life was much less at the end of the treatment period as measured by the Incontinence Impact Questionnaire. These positive results indicate that further research using **EMG** is needed to investigate by the effect of PFMT on bladder function following such surgery.

Participant and Researchers

The case study patient was 45 years old, she was nulliparous and there was no relevant medical history and no problems with continence pre-surgery.

The researchers were *Suzanne Hagen* and *Doreen McClurg* from Glasgow Caledonian University, Scotland, UK.

Methods

The patient underwent 16 weeks of PFMT in conjunction with advice on fluid intake and bladder training, and was assessed with **electromyography** feedback. The **biofeedback** device used was the **NeuroTrac ETS** unit (Verity Medical) and computer screen - a graph could then be seen that could correlate the bioelectrical activity of the muscles. Thus the patient was provided with visual and auditory feedback and encouragement when contracting the muscles correctly. The feedback was used at each out-patient appointment and also provided a record of progress.

The full abstract can be found at <https://pubmed.ncbi.nlm.nih.gov/19475642/>