Voorham - van der Zalm PhD P<sup>1</sup>, Planken E<sup>1</sup>, Lycklama à Nijeholt G<sup>1</sup>, Elzevier H<sup>1</sup>

1. Leiden University Medical Center, Urology

# CHRONIC TESTICULAR PAIN AS A SYMPTOM OF PELVIC FLOOR DYSFUNCTION

### Hypothesis / aims of study

The International Continence Society (ICS) describes chronic testicular pain as 'the occurrence of persistent or recurrent episodic scrotal pain which is associated with symptoms suggestive of urinary tract or sexual dysfunction, in the absence of proven epididymo-orchitis or other obvious pathology [1]. According to the EAU, it is unilateral or bilateral pain, lasting for at least six months, prompting the patient to seek medical advice.

Various treatment options for unexplained scrotal pain have been suggested with limited success rates. Other treatment options mainly focus on symptom reduction, and not on treating underlying pathology [2]. Surgical intervention has dissatisfactory results with a high chance of problems induced by the procedure.

The pelvic floor, consisting of muscular and fascial components, is the binding element between the pelvic visceral organs. Pelvic floor dysfunction is recognized to be related to complaints of micturition, defecation and/or sexual function.

A possible relation between chronic testicular pain and pelvic floor overactivity has not yet been investigated, despite the fact that the ICS definition of chronic scrotal pain implies that pelvic floor dysfunction may play a role in its pathophysiology.

The aim of this study is to determine whether chronic testicular pain can be related to pelvic floor overactivity after ruling out other pathophysiology.

## Study design, materials and methods

41 Patients presenting with chronic testicular pain in which no underlying pathophysiology could be found, were referred to our Pelvic Floor Center, and underwent investigation according to the standardized Diagnostic Investigation of Pelvic Floor Function (DIPFF). This includes history taking using the Pelvic Floor Inventories (PelFIs) questionnaire, with questions related to general health, micturition, defecation and sexual function. An investigation of the pelvic floor function by EMG registration was performed. Complaints were categorized in three domains: micturition, defecation, and/or sexual function. A muscle rest tone of ≥3 ųV was considered to be an elevated rest tone, based on our extensive experience, in absence of international accepted values [3].

#### Results

Of 41 patients (mean age 48, 0 years), 93% had at least one symptom suspiciously of pelvic floor dysfunction in relation to the domains of micturition, defecation and/or sexual function 22% of patients had complaints in 1 of the domains, 24% in 2 domains and 49% in all 3 domains

On EMG-registration of the pelvic floor, 88% of patients appeared to have an elevated rest tone of the pelvic floor, with a mean of 6,  $7 \mu V$ .

### Interpretation of results

Symptoms suspiciously of pelvic floor overactivity are very common amongst men with chronic testicular pain. Furthermore, a large portion of these patients has an elevated rest tone of the pelvic floor on EMG registration. This suggests that chronic testicular pain can be a symptom of an elevated rest tone of the pelvic floor.

## Concluding message

Analysis and treatment by a pelvic floor physiotherapist, after ruling out other underlying pathophysiology by the urologist, could avoid unnecessary surgical interventions or long-term use of analgetics, reducing the risk of complications and chemical dependency.

## References

- Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten U, Van Kerrebroek P, Victor A, Wein A. The standardisation of terminology in lower urinary tract function: report from the standardisation sub-committee of the International Continence Society. Urology 2003;61(1):37-49
- 2. Granitsiosis P, Kirk D. Chronic testicular pain: an overview. Eur Urol 2004;45(4):430-436
- 3. Voorham-van der Zalm PJ, Lycklama à Nijeholt AAB, Elzevier HW, Putter H, Pelger RCM. "Diagnostic Investigation of the Pelvic Floor": A Helpful Tool in the Approach in Patients with Complaints of Micturition, Defecation, and/or Sexual Dysfunction. J Sex Med 2008;5:864-871

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Was this study approved by an ethics committee?	No
This study did not require eithics committee approval because	It was a retrospective study out of the medical record
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	No