Evidence for nerve damage in Persistent Genital Arousal Disorder (PGAD)

Insights from Neurophysiological Studies

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Background

Persistent genital arousal disorder (PGAD) is an intrusive and debilitating condition that affects 0.6% to 3% of the female population worldwide. Although the exact cause of this disorder is not yet established, psychological, pharmacological, and neurological factors, including nerve compression, are suspected.

Aim of the study

To investigate objective evidence for PGAD using neurophysiological testing methods.

Study design, materials and methods

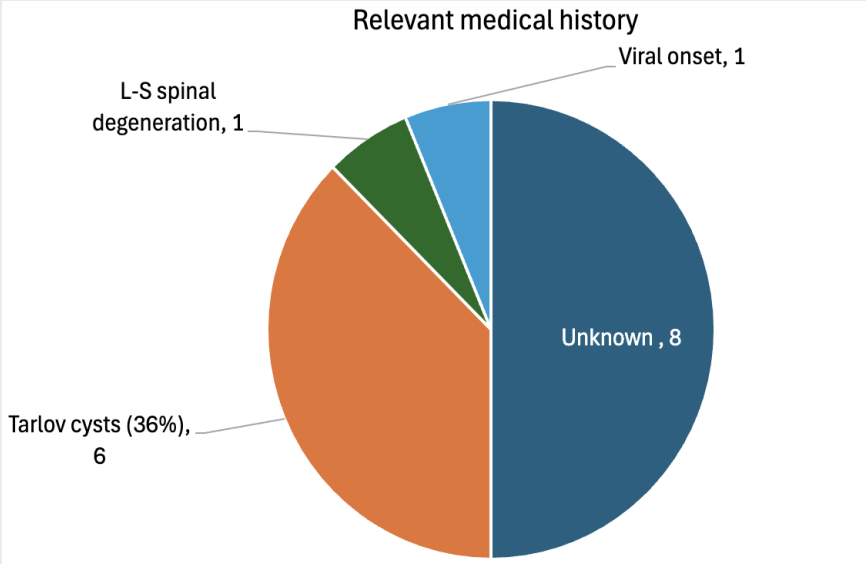
- A retrospective study on one year of data.
- Tibial SEP, Pudendal SEP, Bulbocavernosus reflex (BCR) study, Anal sphincter EMG, S2, S3 and S4 sacral dermatomal evoked potential (dSEP) tests were done on all patients.

Results

- A total of 16 female patients with PGAD symptoms
- Mean age: 50 (21-75) years
- Mean duration of symptoms: 9 years
- Abnormal neurophysiology results in 14 cases (87 %)

Abnormalities in - Pudendal SEP (56%), S4 dSEP(56%), S3 dSEP(56%), S2 dSEP(44%), EMG (25%), BCR (25%) and Tibial SEP (0%).

Abnormal clinical examination (37.5%) - including hyperaesthesia and hyperpathia.



Conclusions

- There is compelling evidence for S2-S4 sacral roots / pudendal nerve damage in PGAD patients.
- Abnormalities predominantly affect the sensory fibres.
- Abnormalities are predominantly subclinical, and hence neurophysiology testing is required to establish the cause of PGAD.

References:

1. (ISSWSH) review of epidemiology and pathophysiology, and a consensus nomenclature and process of care for the management of persistent genital arousal disorder/genito-pelvic dysesthesia (PGAD/GPD)', The journal of sexual medicine, 18(4), pp. 665-697.