

# Accuracy of Online Patient Self-Diagnosis of Vaginismus/Genito-Pelvic Pain/Penetration Disorder (GPPPD)



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## Introduction

- Vaginismus = involuntary vaginal pelvic floor muscle spasm, a form of genito-pelvic pain/penetration disorder (GPPPD).
- 5-17% of women in the U.S. report vaginismus. True prevalence, however, may be higher because:
  - Patients may be reluctant to discuss their symptoms with a healthcare provider (HCP) and
  - HCP training on sexual disorders is often inadequate.
- Web-based interventions can be reliable for the diagnosis of sexual dysfunction, pain (including vulvodynia), and mental health disorders. The accuracy of self-diagnosis of vaginismus specifically has not yet been evaluated in a clinical trial.
- An internet-based diagnostic tool could provide a potential strategy for reaching patients with vaginismus/ GPPPD and directing care.

## Aim

To determine the accuracy of self-diagnosis of vaginismus using an internet-based tool as compared to clinical evaluation by a HCP.

## Methods

- Participants:** 50 women seeking treatment at two U.S. private practice sexual medicine clinics, with no previous diagnosis of vaginismus or GPPPD, were recruited as part of a validation study for self-selection of an over-the-counter vaginal dilation device.
- Protocol:**
  - Participants were invited to view a website listing the diagnostic criteria of vaginismus and report their symptoms and diagnostic conclusion to an interviewer.
  - Participants then underwent an evaluation by a HCP blinded to the self-diagnosis results.
- Evaluation:** Diagnostic concordance was measured by calculating agreement between self-diagnosis and HCP diagnosis using Cohen's Kappa coefficients.

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HCP Diagnosis			
N=50	Vaginismus	No vaginismus	Total
Self-Diagnosis Vaginismus	35	3	38
Self-Diagnosis No Vaginismus	1	11	12
Total	36	14	50

*In 92% of participants who self-diagnosed vaginismus, a blinded HCP also diagnosed the condition, indicating substantial agreement,  $\kappa = 0.79$  [95%CI .60-.99], between self-diagnosis of vaginismus and HCP diagnosis of vaginismus.*

## Conclusion

Our findings demonstrate that self-diagnosis using a web-based list of symptoms for vaginismus can be accurate relative to the diagnosis made by a HCP during a clinical visit.

Despite the demonstrated accuracy of self-diagnosis of vaginismus, thorough evaluation by a HCP is critically important: vaginismus is a non-specific disorder of muscle spasm, the underlying causes of which can be multifactorial and require an approach to therapy that addresses the primary etiology of pain. In participants both with and without vaginismus, other vulvovaginal conditions were observed.

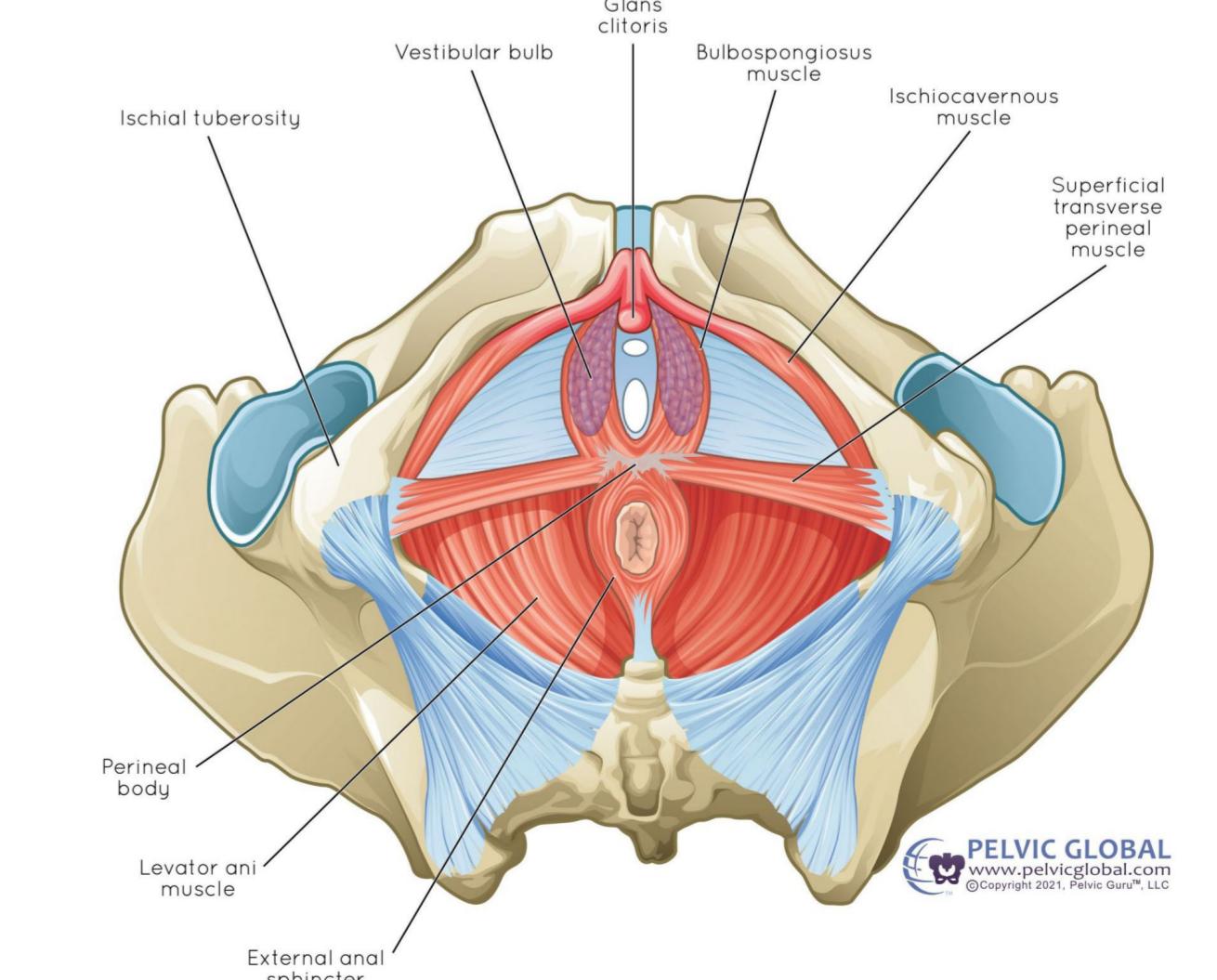
A potentially important starting place, a web-based self-diagnostic tool for vaginismus could shorten the amount of time that it takes patients to get a diagnosis and lead to sooner treatment for this often-ignored pain condition.

## Acknowledgements

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## Results

- Self-diagnosis of vaginismus: 38 of 50 participants (76%).
- HCP diagnosis of vaginismus: 35 of the 38 participants who self-diagnosed vaginismus (92%).
- Discordant diagnoses:
  - Of the 3 participants who self-diagnosed vaginismus but were not diagnosed with the condition by a HCP, one was diagnosed with genitourinary syndrome of menopause. Two did not have significant distress from their symptoms.
  - Of the 12 participants who did not self-diagnose vaginismus, 1 (17%) was diagnosed with vaginismus by the HCP.
- Concomitant vulvovaginal symptoms, like abnormal bleeding or skin changes: present in 7 of 50 participants (14%).
- There was **substantial agreement,  $\kappa = 0.79$  [95%CI .60-.99]**, between self-diagnosis of vaginismus and HCP diagnosis of vaginismus.



*Pelvic floor musculature. Vaginismus is characterized by involuntary pelvic floor muscle spasms and is a type of genito-pelvic pain/penetration disorder (GPPPD).*