

PELVIC FLOOR AND OBTURATOR INTERNUS MYOFASCIAL PAIN IS COMMON IN PATIENTS WITH PELVIC FLOOR SYMPTOMS

Hypothesis / aims of study

This original work was designed to explore the prevalence of pelvic floor and obturator internus (OI) myofascial pain in women presenting for evaluation of pelvic floor disorders (PFD). Pelvic floor and obturator internus myofascial pain refers to pain arising from pelvic and internal hip muscles [levator ani (LA) and OI] and connective tissue¹. The result can be chronic pelvic pain that significantly and adversely affects quality of life for many patients². Female pelvic medicine and reconstructive surgery (FPMRS) providers at our institution routinely examine the internal hip and pelvic floor muscles on all new patient examinations and have anecdotally identified an increased prevalence of pelvic floor and OI myofascial pain in this population. We aimed to formally estimate this prevalence.

Study design, materials and methods

We performed a retrospective cross sectional study of all new patients presenting to our FPMRS practice for new patient evaluation from 1/2014-4/2016. A pelvic floor and OI myofascial examination was performed on all new patients by transvaginal palpation of the OI and LA muscles bilaterally proceeding counter clockwise starting with right OI and ending with left OI. Pain was recorded on an 11-point verbal pain rating scale. Myofascial pain scores were categorized as none (0), mild (1-3/10), moderate (4-6/10), or severe (7-10/10) based on the numeric rating.

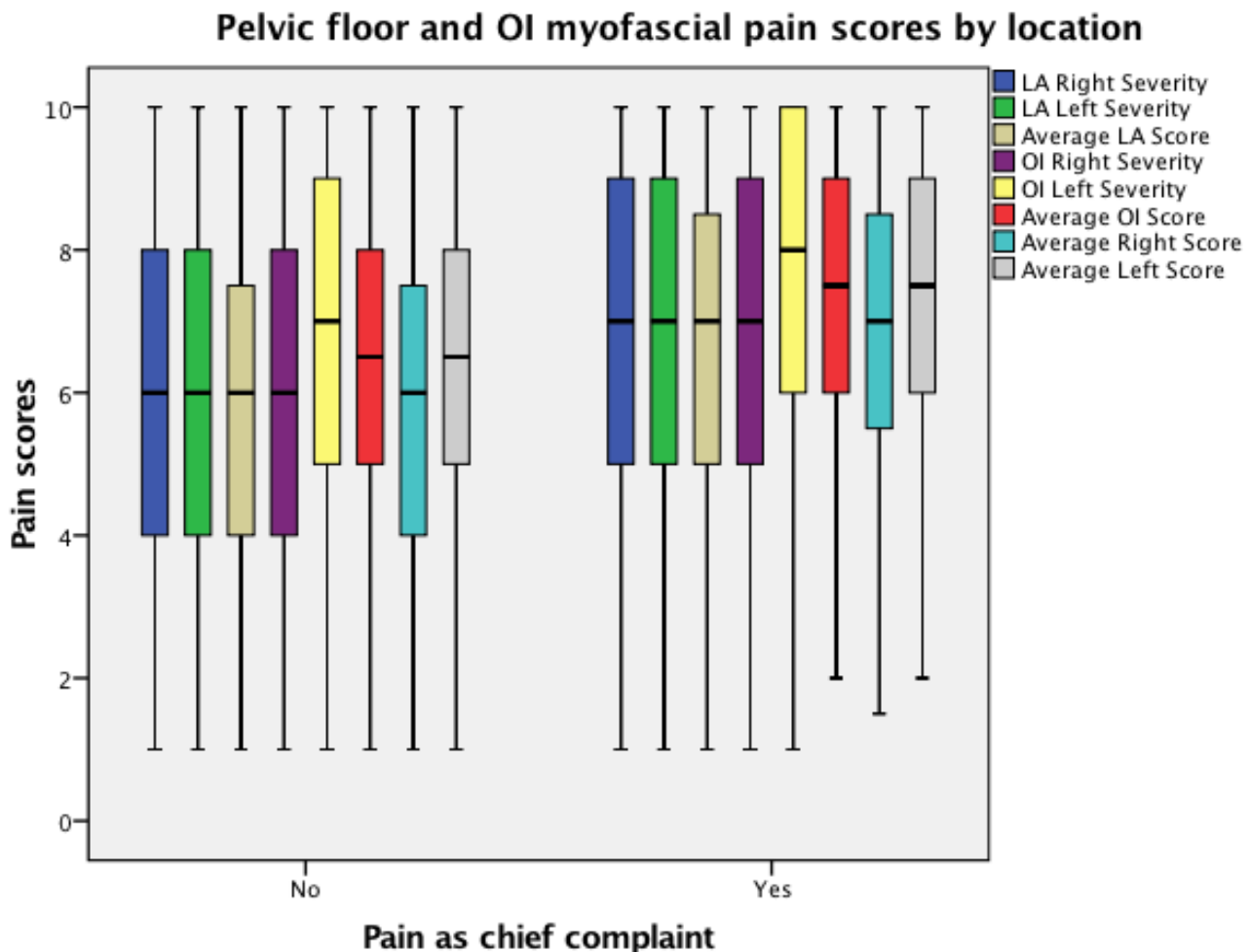


Figure. Myofascial pain scores by location examined for patients presenting with chief complaint of pain (yes) and those without complaint of pain (no). $p < 0.0001$ at all sites. Data presented as median (horizontal bar) and interquartile range (box). LA, levator ani; OI, obturator internus.

Results

A total of 912 new patients were evaluated during the study period with chief complaints including urinary symptoms ($n=91.8\%$), prolapse ($n=30.4\%$), and pain ($n=58.3\%$); some patients reported more than 1 chief complaint. The average age in this cohort was 55 ± 14.9 years. Most women were obese (mean BMI 30.2 ± 7.48), white (70%), parous (median parity 2, IQR 1-3), and

postmenopausal (68%). Some degree of pelvic floor and OI myofascial pain was identified on examination in most patients (93%). Most rated their pain as severe (68.9%); mild (2.35%) and moderate (22.2%) pain scores were less common. When stratified by the chief complaint of pain, women presenting for evaluation of pelvic floor disorders *without* a chief complaint of pain were found to have median myofascial pain scores of 6/10 in the LA and 6-7/10 in the OI. In those patients presenting *with* chief complaint of pain, median pain scores were significantly higher at all locations examined ($p < 0.0001$) than median pain scores in patients who did not endorse pain at time of presentation (Figure).

Interpretation of results

Pelvic floor and OI myofascial pain is common in patients presenting with pelvic floor symptoms, even when pain is not a presenting complaint. These results from our population, which was universally examined, suggest pelvic floor and OI myofascial pain may be under-assessed and under-diagnosed in these patients.

Concluding message

This work provides a novel finding of the presence of obturator internus myofascial pain in women with PFD and an association with levator ani myofascial pain/dysfunction. The presence of pelvic floor and OI myofascial pain was present in women with PFD who did *not* present with a chief complaint of pelvic pain. Further investigation into this relationship and on the role of pelvic floor and OI myofascial pain in pelvic floor disorder symptoms (irritative voiding symptoms, pressure, etc.) and bother is warranted.

References

1. Spitznagle TM, Robinson CM. Myofascial pelvic pain. *Obstet Gynecol Clin N Am*, 2014. 41:409
2. Kavvadias T, Baessler K, Schuessler B. Pelvic pain in urogynaecology. Part I: evaluation, definitions, and diagnoses. *Int Urogynecol J*. 2011. 22(4): 385-93.

Disclosures

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