MP35-15
DO STATINS CAUSE TESTOSTERONE DEFICIENCY IN MEN? SYSTEMATIC REVIEW AND META ANALYSIS

Felipe Glina, Leonardo Seligra Lopes, Rodrigo Spinola e Silva, Eduardo Augusto Correa Barros, Santo André - SP, Brazil; Bruno Biselli, São Paulo, Brazil; Sidney Glina, Santo André - SP, Brazil*

INTRODUCTION AND OBJECTIVE: Introduction: Statins are one of the most prescribed classes of drugs worldwide to treat hypercholesterolemia and dyslipidemia. By lowering the level of cholesterol, the precursor of the steroidogenesis pathway, the use of statin could cause a reduction in testosterone levels. Testosterone is essential in biological functions and its reduction can cause negative effects, such as symptoms of hypogonadism. Objective: Evaluate whether the continued use of statins causes testosterone deficiency in men.

METHODS: Systematic Review with Meta-analysis, performed in Medline databases through Pubmed, Embase and Cochrane, until April 2021, PROSPERO CRD42021270424 protocol. Selection performed by two independent authors with subsequent conference in stages. Methodology based on PRISMA statement 2021 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Selected epidemiological studies (cross-sectional studies and ecological studies), with assessed outcome of total testosterone between groups. Bias analysis performed using the MOOSE questionnaire (meta-analysis of observational studies in epidemiology).

RESULTS: A total of 833 articles were retrieved from MedLine (n=717), from Embase (n=1352) and from Cochrane (n=143). Six articles were submitted to meta-analysis. The forrest plot evidenced a reduction in the mean testosterone in patients under continuous use of statins of 55.02 (95% CI=39.40−70.64, I^2=91%, p <0.00001), demonstrating statistical significance. A reduction in total testosterone was shown in all studies, with the exception of Mondul 2010, and in the cumulative analysis of the forrest plot in patients taking statins. However, this mean reduction was not enough to reach levels below normal, 300 ng/dl.

CONCLUSIONS: Statins cause a decrease in total testosterone, not enough to cause a significant deficiency.

Source of Funding: No funding source was used by the authors

MP35-16
IMPROVING QUALITY OF LIFE FOR PATIENTS WITH CHRONIC PELVIC AND GENITAL PAIN THROUGH AN INTERDISCIPLINARY PAIN REHABILITATION PROGRAM

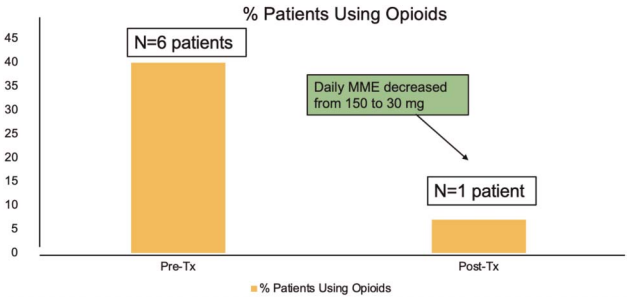
Kevin Hanna, Matthew Ziegelmann, Hannah Betcher, Sevann Helo, Elizabeth Kacel, Wesley Gilliam, Rochester, MN*

INTRODUCTION AND OBJECTIVE: Chronic pelvic and/or genital pain is a disabling condition and commonly associated with poor quality of life, impaired sexual function, and decreased productivity.

METHODS: A series of within-subject ANOVAs (corrected for multiple comparisons) were used to evaluate the effectiveness of an Interdisciplinary Pain Rehabilitation Program (IPRP) on self-reported (pain severity, interference, depressive symptoms, quality of life) and observer-rated outcomes (5-minute walk) among 15 patients receiving care at the Mayo Clinic IPRP between 2016−2018. Additionally, opioid use of participants was assessed throughout the program via total daily Morphine Milligram Equivalents (MME).

RESULTS: Fifteen patients (5 male, 10 female) were identified. Mean age was 47.0 (range: 24−78) and primary diagnoses were pelvic pain (n=13) and penile pain (n=2). Significant within-subject effects were detected for all self-report outcomes and the 5-minute walk test (Table 1). Six patients were on opioid therapy (MME = 49 mg), and all but one successfully tapered off opioids. In the remaining patient, daily MME decreased from 150 mg to 30 mg (Figure 1).

CONCLUSIONS: Intensive outpatient IPRP significantly improves quality of life for patients with treatment-refractory chronic pelvic and/or genital pain. These results support multi-disciplinary treatment paradigms for refractory urogenital pain.



	Pre-Treatment, mean (SD)	Post-Treatment, mean (SD)	P-value*	Effect Size (ηp2)
Pain Severity[a]	4.62 (0.75)	2.65 (1.67)	<0.007	0.70
Pain Interference[a]	4.66 (1.04)	2.55 (1.37)	<0.007	0.77
Pain Catastrophizing[b]	23.13 (12.99)	9.07 (8.38)	<0.007	0.76
Depressive Symptoms[c]	11.53 (5.44)	4.56 (4.17)	<0.007	0.73
Physical Health QOL[d]	36.23 (15.87)	76.58 (15.36)	<0.007	0.90
Mental Health QOL[d]	33.62 (21.92)	75.73 (11.01)	<0.007	0.88
5-Minute Walk (meters)	1217.63 (346.07)	1490.40 (246.42)	<0.007	0.57

[a] = Multidimensional Pain Inventory [b] = Pain Catastrophizing Scale [c] = Patient Health Questionnaire [d] SF- 36 Quality of Life

Source of Funding: None

MP35-17
ONLINE USER TRENDS FOR TESTICULAR AND PELVIC PAIN

Garrick Greear, Sarah Holt, Tristan Nicholson, Hunter Wessells, Thomas Walsh, Marah Hehemann, Seattle, WA*

INTRODUCTION AND OBJECTIVE: The prevalence of chronic testicular pain has increased, as has the understanding among urologists that chronic testicular pain may arise from pelvic floor dysfunction in men. Gauging public awareness of these issues and their treatment is challenging. Online search trends provide an illuminating adjunct to survey-based epidemiologic studies and can inform our understanding of patient perception.

METHODS: A cross-sectional analysis of internet search traffic from 2007 to 2021 for key terms related to chronic testicular pain and the male pelvic floor was performed using the Google Trends® tool. The primary outcome was relative search interest in each term over time. Trends in relative search interest were analyzed with descriptive statistics.

RESULTS: Increases in relative search interest for terms pertaining to testicular pain and the male pelvic floor were observed. Coefficients of determination (R^2) for linear trends in relative search interest ranged from 0.0597 to 0.6597 for individual terms but were higher for medians of pooled terms. Over the study period, median yearly increase in relative search interest for testicular pain terms was 1.75%. Median yearly increase in relative search interest for male pelvic floor terms was 4%.

CONCLUSIONS: Online search interest in testicular pain and the male pelvic floor have increased over the past 15 years. Further research is needed to assess whether these trends parallel patient perceptions of the disease process, as well as referral patterns for pelvic floor physical therapy.