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University of St. Augustine

FOR HEALTH SCIENCES

THE EFFECTS OF SPINAL MOBILIZATIONS, MANUAL STETCHING, AND EXERCISES IN THE TREATMENT OF TESTICULAR PAIN: A CASE REPORT

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INTRODUCTION:

Chronic testicular pain or orchialgia is an uncommon problem with an association of low back pain. Common causes of orchialgia are infection, trauma, surgery, or idiopathic. Referred pain can result from mid-ureteral stones, indirect inguinal hernia, aortic aneurysms, nerve entrapment, or lower back disorders. There is an adequate amount of research on surgical interventions to treat chronic orchialgia, but limited interventions on physical therapy (PT) treatment. The purpose of this case report was to describe the PT management in relieving testicular pain related to genitofemoral nerve entrapment.

METHODS/ PATIENT DESCRIPTION:

Age: 43-year-old former Marine.

<u>Occupation</u>: Currently working as a customs and border patrol agent.

<u>History</u>: Back pain for past seven years with radiating symptoms to the testicles and anterior thigh. Ongoing intermittent pain that resulted in primary functional deficits of running, bowling without extreme pain, sleeping, and sexual activities that lasted up to 2 weeks.

<u>Surgeries</u>: Unsuccessful micro denervation to relieve the symptoms two years ago. <u>Examination</u>: No pelvic asymmetry. However, psoas palpation reproduced patient's symptoms. Painful and hypomobile posteroanterior (PA) to the spinous process from T12 to L3.

INTERVENTION:

<u>Joint mobilizations</u>: Grade III/IV PAs on the spinous process from T12 to L3.

<u>Soft tissue interventions</u>: Deep stripping of the psoas followed by psoas stretching.

<u>Exercises</u>: Spinal stability exercises to address patient's impairments.

Iliohypogastric nerve
Ilioinguinal nerve
Genitofemoral nerve
Lateral femoral
cutaneous nerve
Femoral branch
of GFN
Genital branch
of GFN
Schematic diagram showing the pathway of
genitofemoral nerve (GFN). "Reproduced and

RESULTS:

modified with the permission from Philip Peng

Educational Series".

After six treatment sessions over three weeks, the patient self-discharged secondary to no pain during running and bowling. At 6 weeks follow-up via email, the outcome measures showed significant improvements. Able to return to running, sleeping, and bowling with no pain. Refer to Table 1 for more details. At 4 month follow-up over the telephone, symptom free with sleeping, running, and bowling.

Table 1. Summary of Outcome measures

Illustration of patient's symptoms on a body chart.

| Outcome Measures | At baseline | At 6 Weeks |
|---------------------|-------------|------------|
| ODI | 58% | 0% |
| LEFS | 40/80 | 80/80 |
| NPRS | 5-10/10 | 0/10 |

DISCUSSION:

Patient had successful outcomes because the orchialgia symptoms may be due to genitofemoral nerve entrapment at the psoas muscle. The genitofemoral nerve penetrates through the psoas muscle and then divides into a genital and a femoral component. The genital component of the nerve supplies to the scrotum whereas, the femoral component supplies to the anterior and lateral aspect of the thigh. The entrapment at the psoas muscle can cause pain in the testes and to the anterior and lateral aspect of the thigh. The combination of spinal mobilization and manual psoas stretching might have helped relieve the entrapment resolving patient's symptoms.

SUMMARY AND CONCLCUSION

Testicular pain can occur due to irritation of genitofemoral nerve at L1/L2 or hypertonicity of psoas major muscle.

The case described a successful physical therapy intervention in relieving testicular pain.

Physicians can refer for manual therapy to relieve symptoms before surgical options.

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