PSOAS SYNDROME AND THE OFFICE WORKER:
IDENTIFICATION, PREVENTION AND TREATMENT WITH OMT.

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DEFINITION – PSOAS SYNDROME

Psoas syndrome is defined as a muscular imbalance, strain, spasm, tendonitis or flexion contracture of the iliopectineus muscle.

ANATOMY

ORIGIN: Traverses from T12 – L4/5 vertebral bodies and transverse processes and the intervertebral discs.

INSERTION: Lesser trochanter of the femur.

ACTION: Primary – Hip flexor
Reverse action – Trunk flexion
Secondary – External rotator of hip

NERVE SUPPLY: L2, L3, L4 of lumbar plexus.

ETIOLOGY

• Direct muscular dysfunctions arising from iliopectineus spasm or strain.
• Occurs after maintaining a position with the psoas in a shortened position for an extended period of time e.g., sitting, kneeling, crouching.
• Creates a prolonged flattened A-P curvature of lumbar spine (decreased lumbar lordosis).
• A forward bending (flexion) stress of the lumbar spine.
ETIOLOGY IN THE OFFICE WORKER

• Prolonged sitting postures such as individuals with office jobs.

PREDISPOSING FACTORS

Office workers who sit in a chair:
1. With a sunken seat
2. With a soft seat surface.

WE CAN PREVENT SYMPTOMS PRESENTING WITH EDUCATION/TIPS FOR INDIVIDUALS WHOSE WORK PREDOMINANTLY INVOLVES SITTING AT A WORKSTATION!!

PATIENT PRESENTATION

PAIN LOCATION:
• Waist and low back
• Thoracolumbar junction
• Lumbosacral junction
• Sacroiliac joints
• Gluteal region (typically contralaterally)
• Down leg ****typically stopping at the knee

PATIENT PRESENTATION

• Difficulty sitting or standing upright
• Forward bent posture
• One leg short (on side of spasm)
• One leg externally rotated (typically on side opposite of spasm)
PATIENT PRESENTATION

*****The fundamental disturbance is a loss of the normal lumbar lordotic curve.

Physical Exam demonstrates upper lumbar spine to be fixed in forward bending (flexion); restricted in backward bending (extension).

If findings not present, not likely Psoas Syndrome.

PSOAS PROGRESSION OF SYNDROME

• Bilateral spasm (psoas)
• Unilaterally dominant spasm (psoas)
• Psoas spasm with sacral torsion (**usually backward sacral torsion)
• Pelvic side shift (to side contralateral to unilateral psoas spasm)
• Psoas spasm with sacral torsion and contralateral piriformis spasm
• Psoas spasm with sacral torsion, contralateral piriformis spasm and contralateral sciatic nerve irritation

DIAGNOSIS

Thomas Test

PSOAS SYNDROME
RADIOGRAPHIC DIAGNOSIS

LATERAL FILMS:
Flattening of Lumbar anteroposterior curve

PREVENTION

Frequent breaks from the workstation, i.e., every hour, get up from the desk.

PREVENTION

Self-Stretching Psoas
**PREVENTION**
Ergonomic evaluation of the workstation.

**IDEAL SEATED POSTURE**
- Firm cushion (so buttocks do not sink)
- Legs parallel to floor
- Feet flat on floor
- Obtain a new ergonomically designed chair

**PREVENTION**
Obtain a standing workstation or decrease the amount of time you sit to work.

**PREVENTION**
Decrease flexion activities outside work i.e., do not sleep in supine with a pillow underneath the knees

**PREVENTION**
Take the wallet out of your back pocket while seated to prevent secondary complications to psoas syndrome, such as piriformis syndrome!!!
SOMATIC DYSFUNCTIONS

- Hypertonic iliopsoas
- Posterior rotation of the innominate
- T12/L1 FRS left or right (depending on side of hypertonic psoas)

Secondary dysfunctions:
- Backward torsion with axis on side of hypertonic psoas
- Hypertonic contralateral piriformis

LET’S DO SOME OMT TO TREAT PSOAS SYNDROME