

American Osteopathic College of Occupational and Preventive Medicine
2015 Mid Year Educational Conference, Ft Lauderdale, Florida

**PSOAS
SYNDROME AND
THE OFFICE
WORKER:**

IDENTIFICATION, PREVENTION
AND TREATMENT WITH OMT.

By Yasmin Frank, D.P.T., MHS(osteo).
Associate Professor of Osteopathic
Principles & Practice Nova Southeastern
University, College of Osteopathic
Medicine
& Chad E. Frank, D.O.
Non-Surgical Center for Physical & Sports
Medicine, Plantation, FL

DEFINITION – PSOAS SYNDROME

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



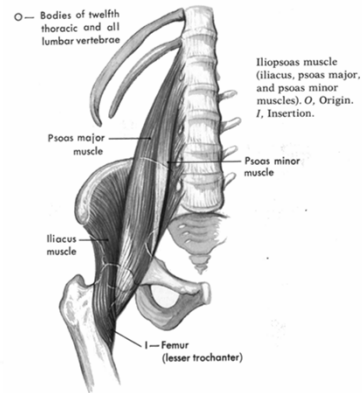
ANATOMY

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

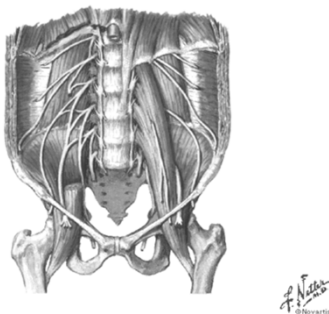
INSERTION: Lesser trochanter of the femur.

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

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



Lumbar Plexus in Situ



ETIOLOGY

- Direct muscular dysfunctions arising from iliopsoas 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.

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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.

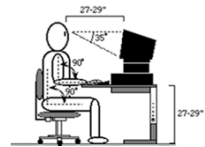


**WE CAN PREVENT SYMPTOMS
PRESENTING WITH
EDUCATION/TIPS FOR
INDIVIDUALS WHOSE WORK
PREDOMINANTLY INVOLVES
SITTING AT A WORKSTATION!!**

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)



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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

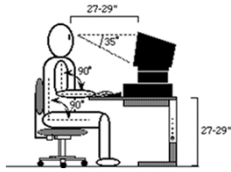
Self-Stretching Psoas



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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!!!



PREVENTION

EXERCISE

- Yoga
- Pilates
- Core strengthening



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PREVENTION

**Osteopathic Manipulative
Treatment!!!**



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**

