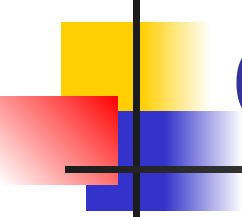


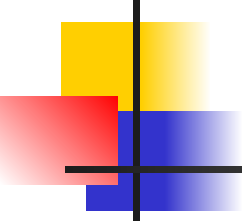
Hyperlordosis

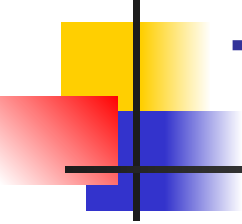
A postural dysfunction presenting
as increased lumbar lordosis,
anterior pelvic tilt and hip flexion



Causes

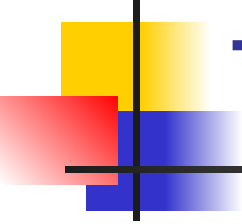
- Structural misalignment throughout the body
 - Contractured ITB
 - Femoral anteversion (medial hip rotation)
 - Hyperextended knees
 - Pes planus
- Occupational factors
 - Prolonged sitting or standing
 - Heavy lifting
- Musculoskeletal
- Obesity
- Pregnancy
- Pathology
 - Spondylolisthesis

- 
-
- Observations page. _____
 - Palpations page. _____
 - Questions page. _____



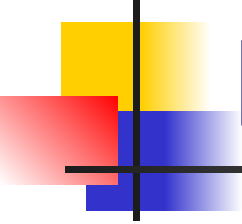
Testing

- Pathologies
 - Valsalva's
 - Kemp's
 - Brudzinski Kernig's
 - Straight Leg Raise
- Muscle imbalances
 - Thomas test
 - Length & Strength Tests
 - Hamstrings
 - Glutes
 - Iliopsoas
 - Adductors
 - quads



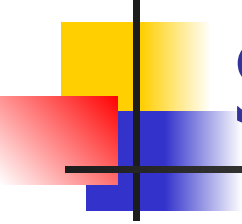
Testing con't

- Joint fixations
 - SI joint motion and palpation test



Progression of testing

- Standing
- Seated
- Supine
- Sidelying
- Prone



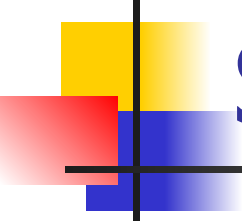
Structures

- Bones

- Vertebrae
- Innominate
- femur

- Muscles

- Lumbar erectors
- QL
- Gluteals
- Piriformis
- Hamstrings
- TFL
- Quadriceps
- Adductors
- Iliopsoas
- abdominals



Structures con't

- Joints

- Facet
- Sacroiliac
- Iliofemoral (hip)
- Pubic symphysis

- Ligaments

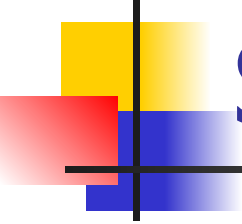
- ALL
- PLL
- SI
- Iliolumbar
- Intertransverse

- Nerves/BV's

- Local nn and blood supply
- Lumbar plexus

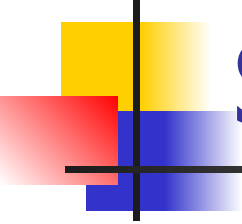
- Other

- Lumbar fascia
- Intervertebral discs



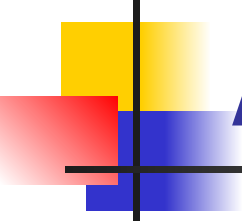
Signs and Symptoms

- Altered biomechanics
 - Increased lumbar lordotic curvature
 - Bilateral anterior pelvic tilt
 - Hip flexion
 - Muscle imbalances
- Onset
 - Gradual
 - Client may experience acute low back pain



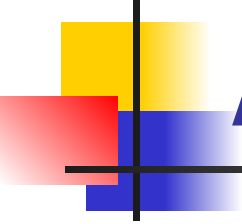
Signs and Sx con't

- Pain due to:
 - HT, ischemic tissue
 - Overstretched tissue
 - Trigger points
 - Facet joint approximation
 - Posterior disc and intervertebral narrowing
 - Nerve root irritation



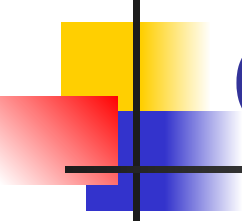
Aims

- Mainly: decrease adverse signs and sx
- Short Term:
 - Assessing for pathologies and muscular imbalances
 - Decrease pain by decreasing HT and TPs
 - Increase circulation to overused muscles
 - Stretch shortened muscles
 - Stimulate and strengthen weak and stretched structures



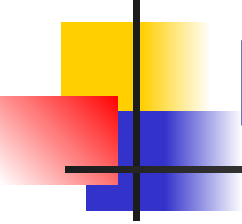
Aims con't

- Long term:
 - Assess for contributing factors and eliminate
 - Retrain posture
 - Eliminate muscular imbalance(s)



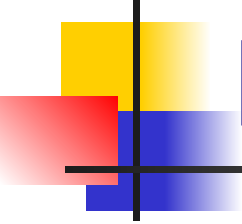
Contraindications

■ Page _____



Hydrotherapy

- Deep moist heat on shortened and contractured musculature
- Cold, stimulating applications to overstretched muscles



Remedial Exercise

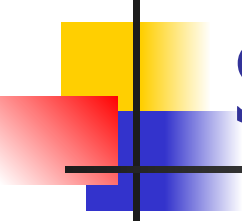
- Abdominal muscles are reflexly inhibited by the hypertonic lumbar muscles, therefore focus must be on relaxing the lumbar muscles before strengthening the abdominals

Stretching:

- Lumbar erectors and QL
- Piriformis
- Quads
- Iliopsoas
- Adductors

Strengthening:

- Glutes
- Hams
- abdominals



Self-Care

- Self massage – as required
- Remex – as per required for muscle groups
- Hydro
 - As per required, same as Tx
 - Epsom salts bath accompanied by stretching

Other – re-educate client on postural awareness

-refer to other practitioner – Chiro, Craniosacral,
Feldenkrais