

CONTRAINDICATIONS/CAUTIONS OF MANIPULATION

THERAPIST CAUTIONS & CONTRAINDICATIONS

- Insufficient subjective assessment of the patient
- Inadequate information about co-existing conditions, disease and/or medication
- Poor appraisal of the patient as a reasonable historian
- Failure to discuss the assessment findings and treatment options with patient
- Failure to receive/agree with patient consent or lack thereof
- Poor/insufficient detailed biomechanical examination
- Insufficient awareness of contraindications and conditions requiring extra care
- Physical limitations size, strength, speed, fatigue
- Mental status and confidence
- Lack of proper equipment (high/low plinth)
- Incompetence

PATIENT CAUTIONS & CONTRAINDICATIONS

- Lack of consent
- Impaired mental or emotional status
- Inability to communicate/unreliable historian
- Unable to relax
- Patient has pain in the position of the technique
- Joint fixation requires joint to be placed in a fully close packed position
- Non-diagnosed constant or continuous 7pain7
- Intoxicated/heavily medicated
- Inappropriate findings, end feel, or patient response with:
 - Scanning examination
 - Biomechanical testing
 - Stress testing
 - Dizziness reproduction testing
 - Pre-manipulative hold
- Instability findings on testing (cautionary if above or below level treating)

BONY CAUTIONS & CONTRAINDICATIONS

Healing fractures

Healing dislocations

Past or present cancers that metastasize to bone (breast, bronchus, prostate, thyroid, kidney, bowel, lymphoma)

Active infection (cautionary with past bone infections)

Osteomyelitis, tuberculosis

Congenital anomalies

Gross foraminal or spinal canal encroachment on x-ray or other imaging examination

AGE RELATED CAUTIONS & CONTRAINDICATIONS

Children (skeletal maturity, consent issues)

Elderly (tissue health and integrity issues)

INERT TISSUE CAUTIONS & CONTRAINDICATIONS

Collagen Disease

Ehlers-Danlos syndrome

Marfan's syndrome

Osteogenesis imperfecta

Achondroplasia

Benign hypermobility syndrome (caution)

Connective Tissue Instability

Collagen disease (see above list)

Trauma

Grisel's syndrome (URTI which leads to laxity transverse ligament)

Down's syndrome (congenital laxity transverse ligament)

Systemic disease/condition (see list below)

Acute post-traumatic stage (minimum 6-8 weeks)

Inappropriate end feel (see patient factor list)

METABOLIC CAUTIONS & CONTRAINDICATIONS

Bone disease
Osteoporosis
Paget's disease

SYSTEMIC CAUTIONS & CONTRAINDICATIONS

Diabetes (caution)
Asthma (caution secondary to possible corticosteroid medications)
Endocrine disorder (caution) (hypothyroidism, hyperthyroidism, hyperparathyroidism)
Endocrine disorder (contraindication if tagged to collagenous effecting drugs)
Haemophilia
Pregnancy (Any history of miscarriage, hypermobility/instability, recent post-partum including hormone effects and hemorrhage issues)

NEUROLOGICAL CAUTIONS & CONTRAINDICATIONS

CNS Disease or Injury

Extra-segmental pain, increased with passive neck flexion
Bilateral or quadrilateral multi-segmental paresthesia, increased with passive neck flexion
Multi-segmental paresis or paralysis
Hyper-reflexia
Babinski, Oppenheim, Hoffman present
Clonus present
Ataxia
Neurological spasticity
Bladder and/or bowel dysfunction
Nystagmus
Dysphagia/dysphasia
Wallenberg's syndrome (posterior inferior cerebellar artery)
Other cranial nerve signs/symptoms

Spinal Cord Disease or Injury

Extra-segmental pain below the level of the lesion which may increase with passive neck flexion

Bilateral or quadrilateral multi-segmental paresthesia below the level of the lesion which may increase with passive neck flexion

Bilateral or quadrilateral multi-segmental weakness or spastic weakness below the level of the lesion

Hyper-reflexia below the level of the lesion

Hypo-reflexia may be present at the level of the lesion

Babinski, Oppenheim present

Hoffman present if lesion is above C5-6

Clonus below the level of the lesion

Ataxia

Neurological spasticity below the level of the lesion

Reflex bowel

Reflex bladder (empties when distended)

Initial loss of reflex erection (2-3 days) then reflex erection (tactile only as reflex ejaculation often lost)

Vaginal sensation and lubrication lost

Cauda Equina Disease or Injury

Hypo-reflexia or areflexia (bilateral and/or multi-segmental)

Bilateral and/or multi-segmental paraesthesia/pain

Dural signs positive

Initially bladder hyperactive (increased urgency and frequency) then paralyzed bladder (overflow incontinence)

Fecal retention with impaction and fecal fluid overflow

Loss of genital sensation

Initial loss of reflex erection or ejaculation

Multiple Nerve Root Involvement

Two or more cervical and three or more lumbar unilateral nerve root involvement

Presentation of bilateral nerve root involvement

Sign of the Buttock (includes 7 tests)

1. Buttock large and swollen and tender to touch
2. Straight leg raise limited and painful
3. Limited trunk flexion
4. Hip flexion with knee flexion limited and painful
5. Empty end feel on hip flexion
6. Non-capsular pattern of restriction at the hip (Flex ABD IR)
7. Resisted hip movements painful and weak (especially hip extension)

Possible conditions include:

rheumatic bursitis

fractured sacrum

osteomyelitis of upper femur

ischiorectal abscess

neoplasm of upper femur

septic sacroilitis

neoplasm of ilium

septic gluteal bursitis

VASCULAR CAUTIONS & CONTRAINDICATIONS

Vertebral artery insufficiency

Vascular disease (aneurysm)

Atherosclerosis (caution as intima lining weakened)

Signs of vascular insufficiency in that region

Bleeding disorders

Aortic graft

INFLAMMATORY CAUTIONS & CONTRAINDICATIONS

Active Inflammatory Disease:

- Rheumatoid arthritis
- Psoriatic arthritis
- Ankylosing spondylitis
- Reiter's syndrome

Inactive Inflammatory Disease (caution)

MEDICATIONS

- Anticoagulants heparin, caution with ASA
- Any medication that affects collagen
 - Corticosteroid, tamoxifen
- Any medication linked to osteoporosis (see list below)
- Anti-depressants (caution)

MEDICATIONS HARMFUL TO BONE

Glucocorticoids

Diseases treated with glucocorticoids:

- Rheumatoid arthritis, osteoarthritis, bursitis
- Asthma, COPD, allergic rhinitis
- Liver disease
- Lupus, psoriasis, severe dermatitis
- Cancers – leukemia, lymphoma
- Ulcerative colitis, Crohn's
- Severe allergic reactions and inflammations
- Multiple sclerosis
- Post organ transplant
- Inflammation and disease of the eye (glaucoma)

Methotrexate

Diseases treated with methotrexate

Cancers

Immune disorders

Resistant arthritic conditions

Cyclosporine A

Immunosuppressant drugs used to treat

Post-transplant

Immune diseases

Gonadotropin Releasing Hormone

Endometriosis

Other Medications

Heparin

Cholestyramine (controls blood cholesterol levels)

Thyroid hormones

Anticonvulsants

Aluminum-containing antacids