Spine and Peripheral Joint HVLA

Clinical Safety, Contraindications & Risk Recognition

Staff Data Sheet – Clinical and Service Learning Contexts

Purpose

This data sheet provides a concise, practice-focused summary of the Australian Chiropractic College (ACC) expectations regarding **clinical safety, contraindications, risk indicators, and post-treatment management** associated with the use of **Spinal and Peripheral Joint High-Velocity Low-Amplitude Thrust (HVLAT)** techniques.

This document is derived from, and must be read consistently with, the *ACC Spine and Peripheral Joint HVLA Policy and Procedure*.

It does not replace policy requirements or supervisory obligations.

Key Position of the College

- HVLATs are widely used manual techniques with recognised benefits for musculoskeletal conditions when appropriately applied.
- Clinical safety relies on **history-led risk assessment**, recognition of **contraindications**, and appropriate **clinical reasoning**, not routine or formulaic testing.
- Students may only perform HVLATs:
    - within scope,
    - under appropriate supervision, and
    - in accordance with ACC policies (including age-specific restrictions).

Common HVLA Techniques (Contextual Awareness)

The following techniques are commonly referenced in chiropractic practice:

- Diversified technique
- Gonstead adjustment
- Thompson Terminal Point (Drop) technique

These descriptions are contextual only and do not imply endorsement of any single technique over another.

Absolute Contraindications to HVLAT

HVLATs **must not be performed** where any of the following are present or suspected in the relevant anatomical region:

Structural / Pathological

- Malignancy, infection, necrosis, or significant bone weakening
- Fracture, dislocation, or unstable healed fracture
- Atlanto-axial instability

- Severe demineralisation or ligamentous rupture

Neurological

- Acute myelopathy
- Cauda equina syndrome
- Intracranial hypertension
- Progressive neurological signs across multiple dermatomes
- Signs suggestive of meningitis

Vascular / Haematological

- Known vessel wall pathology
- Bleeding disorders
- Anticoagulant therapy (e.g. warfarin, heparin)

Other

- Lack of a working diagnosis
- Lack of informed consent
- Inability to position the client safely due to pain or resistance

Relative Contraindications

HVLATs require heightened clinical judgement where the following are present:

- Previous adverse reaction to HVLAT
- Disc pathology
- Inflammatory or systemic arthritides
- Pregnancy
- Osteoporosis
- Long-term corticosteroid use
- Anticoagulant use
- Ligamentous laxity
- Psychological dependence on HVLAT
- Vertigo
- Arterial calcification
- Spondylosis, spondylolisthesis, spondylolysis

Transient Effects Following HVLAT

Mild, self-limiting post-treatment responses may occur, including:

- Local soreness or discomfort
- Headache
- Fatigue
- Dizziness
- Paraesthesia
- Localised radiating symptoms

These typically resolve within 12–48 hours.

Potential Serious Complications (Rare)

Cervical Region

- Vertebrobasilar accident
- Myelopathy
- Cervical disc lesion
- Pathological fracture
- Horner's syndrome
- Diaphragmatic paralysis

Thoracic Region

- Rib fracture
- Costochondral separation
- Thoracic disc herniation

Lumbar Region

- Worsening neurological deficit
- Lumbar disc herniation
- Cauda equina syndrome
- Rupture of abdominal aortic aneurysm

Cervical Artery Insufficiency – Clinical Indicators

Cervical artery pathology is a recognised contraindication to cervical HVLAT.

Indicative Signs

- Nystagmus
- Gait disturbance
- Horner's syndrome

Indicative Symptoms

- Sudden severe headache or neck pain
- Dizziness, vertigo, syncope
- Visual disturbance
- Dysphagia or dysarthria
- Drop attacks
- Facial or limb paraesthesia
- Tinnitus
- Unexplained autonomic symptoms (pallor, sweating, confusion)

Key Principle:

The presence of these signs or symptoms contraindicates cervical HVLAT until medically investigated.

Upper Cervical Spine Ligament Instability – Awareness

Conditions associated with possible instability include:

- Rheumatoid arthritis or inflammatory arthritides
- Down syndrome

- Congenital odontoid anomalies
- Recent head or neck trauma
- Infection or tumour

Cardinal Warning Features

- Loss of balance with head/neck movement
- Facial or limb paraesthesia influenced by movement
- Bilateral neurological symptoms
- Movement-provoked nystagmus
- Severe guarding or markedly reduced cervical ROM

Where suspected, HVLAT is contraindicated pending further assessment.

Ongoing Clinical Review

At each consultation, students and supervisors must:

- Review changes in medical history, trauma, and medications
- Reassess for emerging contraindications
- Escalate concerns promptly

A change in symptom pattern, deterioration, or new neurological features requires cessation of HVLAT and further investigation.

Incident Management

- Any adverse response must be managed immediately under supervision.
- Neurological deterioration requires urgent referral (ED or ambulance as appropriate).
- All incidents must be documented and reported in accordance with ACC incident reporting procedures.

Key Take-Home Messages

- HVLAT safety is driven by **clinical reasoning, not routine testing**
- History and symptom recognition are primary safeguards
- Contraindications override technique preference
- When uncertainty exists, **do not proceed** and escalate appropriately

Governance Note

This data sheet is an **educational and clinical support document**.

Authoritative requirements are contained within the *ACC Spine and Peripheral Joint HVLA Policy and Procedure*.