CAD and VBI Assessment & Management

Staff Data Sheet – Clinical and Service Learning Contexts

Purpose

This data sheet provides a concise, practice-focused summary of the Australian Chiropractic College (ACC) requirements for the **recognition, assessment, and management of suspected Cervical Artery Dissection (CAD)** and **Vertebrobasilar Insufficiency (VBI)**. It is intended for use by ACC staff, Chiropractic Supervisors, and students within ACC Service Learning Environments (SLEs) and Work Integrated Learning (WIL) settings.

This document is derived from, and must be read consistently with, the ACC **Vertebral Artery Insufficiency (VBI) Policy and Procedure**.

Key Position of the College

- **VBI positional tests are not supported by current evidence** and may be contraindicated.
- **VBI tests are not to be performed** by staff or students within ACC SLEs.
- VBI testing is **not required for competence to practice** and is not assessed by the College.
- Clinical safety is achieved through **history-led risk assessment, recognition of red flags, and timely referral**, not through provocative vascular testing.

Definitions (Clinical Focus)

- **Cervical Artery Dissection (CAD):** A tear in the inner lining of the carotid or vertebral artery that may compromise cerebral blood flow and lead to stroke.
- **Vertebrobasilar Insufficiency (VBI):** Compromised blood supply to the brainstem and posterior brain, commonly due to atherosclerosis in older adults or CAD in younger adults.

Clinical Context

- CAD is **rare**, but a recognised cause of stroke in younger adults.
- Neck pain and headache—common chiropractic presentations—may be **early indicators** of CAD.
- No single pathognomonic sign exists; **pattern recognition and clinical reasoning** are essential.

Indicators Suggestive of CAD

Clients may present with one or more of the following:

Pain Features

- Sudden onset **severe neck pain or headache**, especially if:

  - Different in character to previous episodes
  - Described as the *worst ever* experienced

Neurological Features

- Focal neurological signs, including:
  - Visual disturbance or loss
  - Cranial nerve signs
  - Horner's syndrome
- Note: neurological signs often do not present until later in the progression of the condition.

Other indicators of central nervous system ischaemia

Symptom Patterns

- Change in the aura pattern in a known migraine sufferer
- The **"5 Ds and 3 Ns of Coman"**:
  - Dizziness
  - Diplopia
  - Dysphagia
  - Dysarthria
  - Drop attacks
  - Nystagmus
  - Nausea
  - Unilateral numbness
  - (Ataxia is also commonly included)

History and Risk Factors

- Recent **acute trauma** (including seemingly minor trauma)
- Indicators of underlying vascular disease, such as:
  - Connective tissue disorders
  - Clotting disorders
  - Hypertension
  - Hypercholesterolaemia

Physical Examination Requirements

Where clinically indicated, examination should include:

- Measurement of **blood pressure**
- **Auscultation of carotid and vertebral arteries**

Note: Hypertension alone is **not** a contraindication to chiropractic care.

Management and Referral Pathways

Suspected CAD

- **Do not perform cervical spine manipulation or provocative testing**.
- **Immediate referral** to a local emergency department is required.
- If neurological signs are present:
  - Arrange **ambulance transport**.
- Provide the client with a **written referral letter** that:
  - Details presenting signs and symptoms
  - States concern for possible CAD

- Recommends further investigation (e.g. MRI angiography)

Suspected VBI in Older Adults

- Refer the client to their **General Practitioner** for further medical evaluation.
- Provide a **written referral letter** outlining:
  - Relevant history
  - Clinical findings
  - Rationale for concern

Professional and Educational Expectations

- Staff and students must act within **scope, supervision, and College policy**.
- Cultural safety principles must be upheld in all clinical interactions.
- Differences in professional opinion encountered during external WIL placements do not alter ACC requirements within ACC SLEs.

Key Take-Home Messages

- **Do not rely on VBI tests** for vascular risk screening.
- **History and symptom recognition** are the primary safety tools.
- When in doubt, **err on the side of referral**.
- Early recognition and appropriate escalation are central to **patient safety and professional responsibility**.

For full rationale, evidence base, governance requirements, and policy authority, refer to the ACC Vertebral Artery Insufficiency (VBI) Policy and Procedure.