

Cervicogenic Headache – September 2014

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Aim of talk

- Discuss the basis for cervicogenic headache
- Identify in under 5 minutes if a headache is likely to be of cervical origin
- Discuss treatment model

Headache as a Diagnostic Dilemma

- Over 300 different types of headaches and mechanisms in the literature
- Difficult to distinguish between migraine without aura, tension headache and cervicogenic headache
- 20% of cervicogenic headache patients will fit the diagnostic criteria for migraine
- 12% of migraine without aura attacks will start in the sub-occipital area
- Potential for mixed headaches
- Therefore - GP should be involved

Does Cervicogenic Headache Exist as a Clinical Entity?

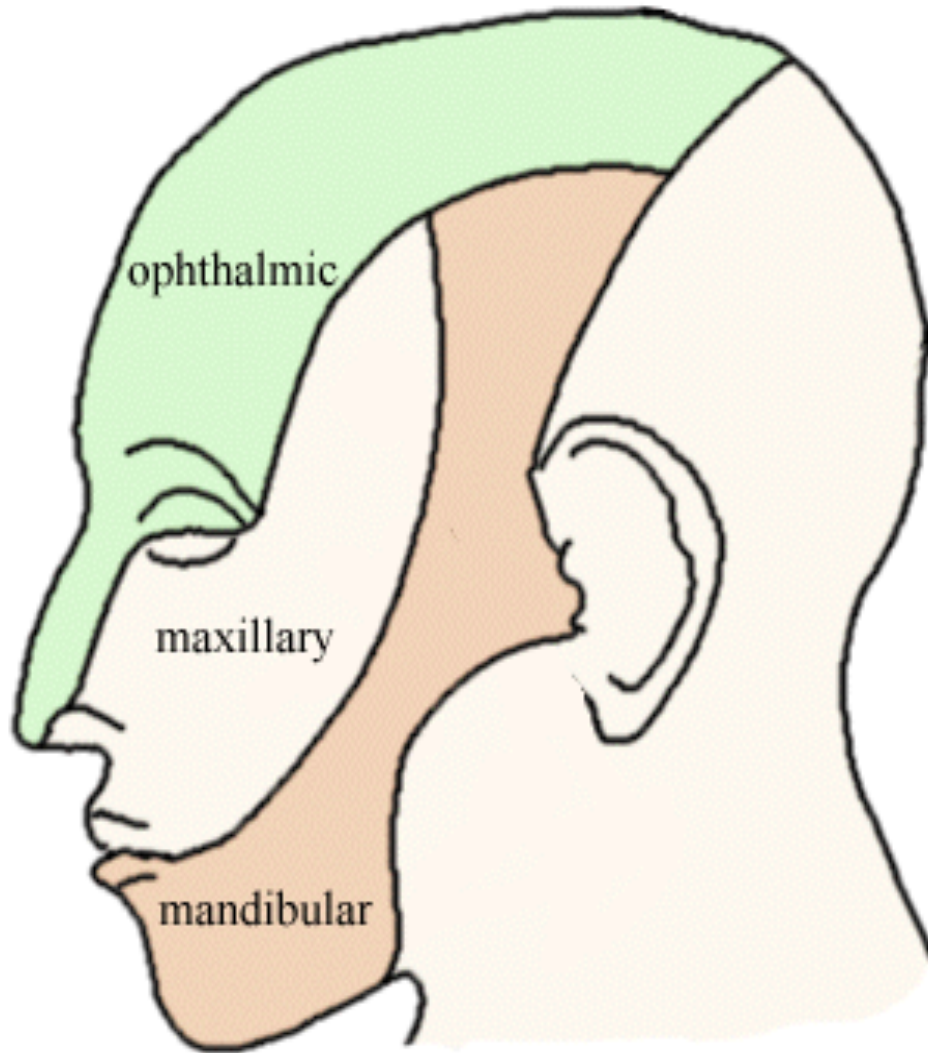
- Recognised by International Headache Society (2000)
- Recognised by the International Association for the Study of Pain (1994)
- Cochrane (2002)
- Studies in normal volunteers have shown that headaches can arise from the upper cervical joints (Dywer et al 1990) and that headache can be eliminated by blocking one or more of the upper cervical nerves (Ehni and Benner 1984, Bogduk and Marsland 1986)
- 4 -10% of headaches have a cerviogenic component

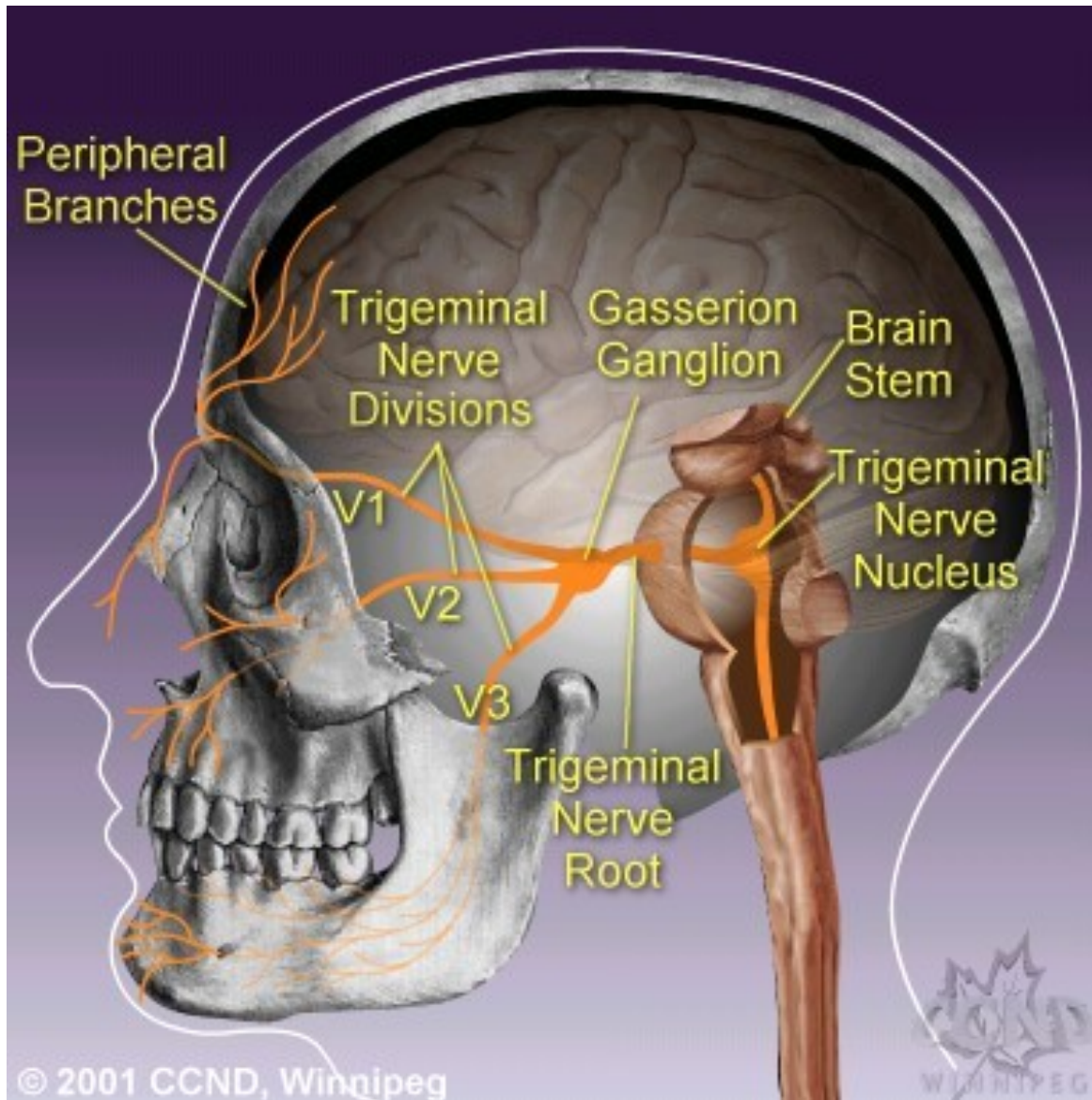
Cervical Headache Defined

- Referred pain in the head from a noxious source in the cervical spine
- Any structure innervated by the first 3 cervical nerves is capable of producing cervical headache

Mechanism

- Convergence in the trigeminocervical nucleus between nociceptive afferents from the receptive fields of the first 3 cervical nerves and the field of the trigeminal ganglion

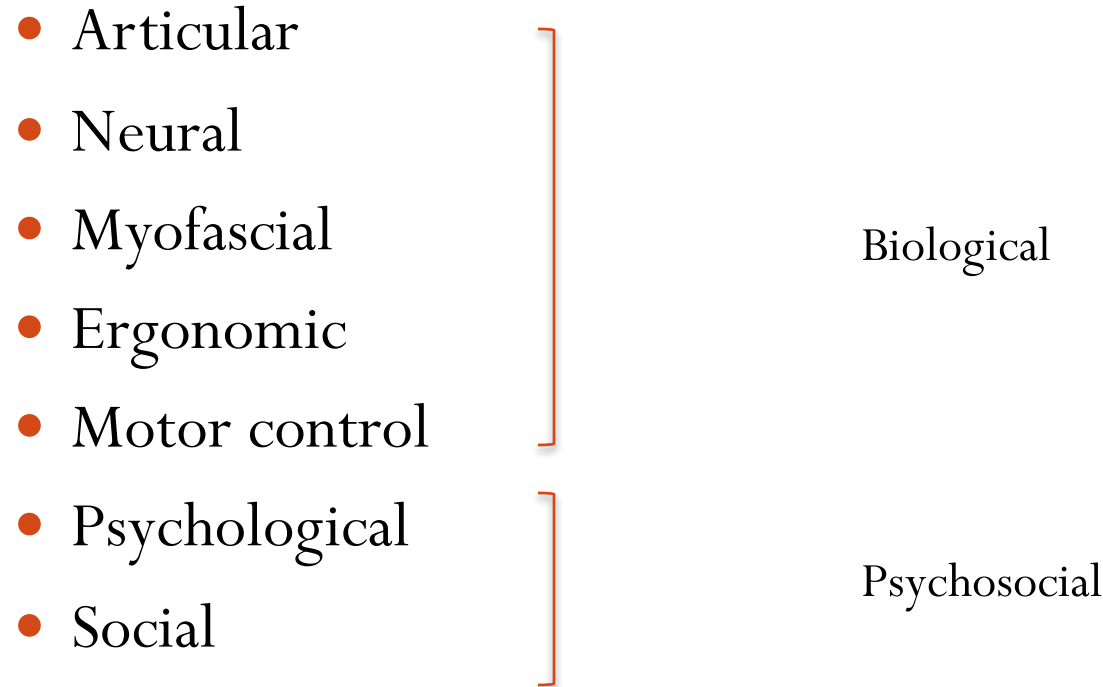




Symptoms

- Often unilateral or unilateral dominant and does not shift sides
- May present with ipsilateral shoulder or arm discomfort
- Pain typically starts in the neck
- Pain intensity mild to severe
- Typically non-throbbing
- Other symptoms such as vomiting, photophobia, phonophobia, aura or tension headache symptoms (e.g. tight band) may or may not be present, but if present are not dominant features
- Dizziness or visual disturbances may be present (40%)
- Lack of response to migraine drugs

Assessment and Treatment Model - Biopsychosocial



Physical Examination of the Upper Cervical Spine

- Posture/ergonomics
- Active Range of motion (note changes with different postures of any significant movements)
- Passive range of motion
- Palpation
- Tests for deep cervical muscle strength and endurance
- 30 – 60 minutes

Physical Features

- Poor posture – demonstrate posture on neck range of motion
- Often but not always restriction of range of motion in neck
 - This can be subtle
- Upper cervical or occipital external pressure is unilateral painful or reproduces headache
- Deep cervical muscles are typically weak or have poor endurance (10sec*10*reps for 8 - 10mm)
 - Dysfunction is evident if
 - Inability to complete 10*10, Shaking, Pressure drop, Inability to return to starting pressure

Treatment

- Depends on the assessment
- Single modality approaches are poor practice

Evidence

- Results of RCT – both manipulation and exercise had significantly reduced headache frequency and intensity. 10% more patients gained relief with a combination of therapies
- Effects sizes moderate and clinically relevant
- Manual examination by skilled manual therapist is as effective in determining site of cervical level of pain as an anaesthetic joint block (Bogduk 1985)
- Cervicogenic- manipulation is effective (Cochrane 2002 – Non Invasive Physical Treatments for Chronic/Recurrent Headache)

What you need to assess

- O - C1 flexion/extension
- C1- C2 rotation
- C2 – C3 side bending
- Palpation each side of C1, C2, C3 and

- If there is loss of range of motion, reproduction of symptoms and if their history indicates a history of injury or a physical aggravator then possibility of cervicogenic headache

Suggestions for Physio Trial

- 4 – 6 sessions over 4 – 6 weeks should give an idea if treatment is likely to assist

Practical session