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Draft Australian Clinical Guidelines for Health Professionals Managing People with Whiplash-Associated Disorders consultation

SIRA

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**RE: Feedback on ‘Health Professionals Managing People with Whiplash-Associated Disorders (WAD), Fourth Edition.’**

SIRA is seeking feedback on the draft Australian Clinical Guidelines for the document entitled ‘Health Professionals Managing People with Whiplash-Associated Disorders, Fourth Edition.’

<https://www.sira.nsw.gov.au/consultations/draft-whiplash-guidelines>

Our Specialist Pain Medicine Physicians at Pain Specialists Australia are alarmed by this document for several reasons.

This is a consensus document that significantly limits the ability for WAD patients to receive appropriate assessment and therapy, both in the acute and chronic phases. This document will negatively affect sufferers of this condition and their families as well as have a negative impact on the local communities and the wider Australia.

Simply put, this will cost lives.

There are no specialist pain management medical representatives on the panel.

There are no relevant representatives from any of the following relevant faculties,

- Faculty of Pain Medicine of Australia and New Zealand (FPM)
- Royal Australasian College of Surgeons (RACS)
- Royal Australasian College of Physicians (RACP)
- The Royal Australian and New Zealand College of Radiologists (RANZCR)

There are no representatives from any of the relevant societies like the

- Neuromodulation Society of Australia and New Zealand (NSANZ),
- Neurosurgical Society of Australasia (NSA) or
- Spine Society of Australia (SSA).

With respect, the only clinically active practitioners in your panel appear to be the following,

- A chiropractor (allied health)
- A practicing physiotherapist (allied health)
- A general practitioner (medical)
- A rehabilitation specialist (medical)

In usual clinical practice, consensus guidelines would have a panel of local and international experts, representing the multispecialty group that clinically treats and manages these patients. This has not been done.

If you choose to define an allied health approach to the assessment and treatment whiplash, then do just that, i.e., appraise the evidence in a scientific manner and make recommendations accordingly and specifically to the allied health approach with which your panel represents. However, we'd advise against making clinical recommendations on treatments your group are unfamiliar with.

You must allow sufficient scope for clinicians to use their expertise and acumen to treat patients depending on the local community and cultures that they serve. What should not be done is make broad sweeping statements across most medical specialities without having any of the relevant expertise on your panel.

A group of people voting on what treatments they would and would not accept is in no way a scientific approach to defining best clinical practice. The scientific papers that were used are outdated and limited in scope and consideration. There are multiple more rigorous means by which consensus guidelines can be developed e.g., Delphi Processes or other.

Here are some of our serious clinical concerns.

### 3.1. Acute whiplash recommendations

#### 3.1.1. Summary of Diagnosis recommendations

##### Imaging

You have said "Refer for imaging to determine probable diagnosis of cervical radiculopathy" implying there is no indication to refer for imaging in other circumstances. This will lead to injuries being missed.

There are many other reasons to consider imaging in acute whiplash. Multiple anatomical areas and structures need to be considered even without radicular pain e.g. the cranio-cervical joint [CCJ] complex, bones, ligaments and facet joint capsules. Relevant pain syndromes that occur may include the upper cervical spine (cervico-encephalic syndrome) or lower cervical spine (lower cervical syndrome) [Johannsen 2006].

Imaging should be considered if there is any concern about fracture or instability. Other aspects to consider imaging include; [Fleming 2002]

- Any alteration in level of consciousness.
- Any evidence of trauma to the head or neck (“trauma above the clavicles”).
- Any evidence of intoxication.
- Any distracting painful injury elsewhere.
- Age greater than 65 years.
- High-speed rear-end motor vehicle collision.
- Focal neurologic symptoms or signs.

Clinical judgment is still the overriding principle and radiography must be carried out while ensuring immobilization of the cervical spine.

We would defer the nuance about imaging in this group of patients to our radiology experts and colleagues.

### 3.1.3. Summary of Treatment recommendations

#### Neutral Medications Amitriptyline and Pregabalin

You have made comments on two medications. What about all the other relevant medications? The way you have drafted these guidelines will limit access of any relevant medications. You have made no mention or comment of them. Gabapentin, nortriptyline, and many other anti-neuropathic medications. What about other medications like a short course of muscle relaxants such as orphenadrine, baclofen or diazepam, or even a controlled short course of opioids for acute injury.

#### Medications Conditional Against Opioids

In some instances, opioids can be considered lifesaving. Why would you suggest against this therapy?

#### Injections Corticosteroid Injection Strong Against

You have not made any comments on WAD associated headache, where WAD has associated headaches in up to 90% of a cases associated with neck pain [Obermann 2015].

You have not commented on treatment for associated headaches. Why not? Headaches affects most patients with acute whiplash. This is a vital aspect of whiplash assessment and treatment. Have you considered your recommendations in conjunction with headaches?

You have provided comments on pain medicine, radiology, interventions but not headaches. This makes no sense and are another reason why this document is not fit for purpose.

The C2–3 joint pathology is considered a valid aetiology of cervicogenic headaches. The C2–3 facet joint is innervated by the third occipital nerve (TON); hence, headaches arising from C2–3 pathology were called third occipital headache in the past. Lord and colleagues evaluated the prevalence of TON headache among 100 patients with neck pain for at least 3 months following whiplash using history, physical examination, and diagnostic cervical medial branch blocks with local anaesthetics alone [Lord 1994]. The prevalence of TON headache in this cohort was 27% (95% CI 18% to 36%) and as high as 53% (95% CI 37% to 68%) among those with headache as the dominant symptom. TON pain is a pain symptom that can be effectively treated with radiofrequency neurotomy (see below).

#### 3.1.4. Summary of Assessment consensus recommendations

No to MRI and US in acute whiplash.

There are other indications for MRI and US in this situation. We would defer to our specialist radiology colleagues to provide their expert recommendations.

### 3.2. Chronic whiplash recommendations

#### 3.2.2. Summary of Treatment recommendations

Neutral for Amitriptyline and Pregabalin

See our comments above on medications. Neutral for amitriptyline you've said conditional for in the draft guidelines but in the summary have said neutral.

See our comments on medications above.

Neutral Surgery for Cervical Radiculopathy

We would defer this to relevant spinal and neurosurgeons practicing in this field of surgery.

We would advise your panel to have input by practicing spinal surgeons, who are familiar with relevant studies and text including the nuance of their clinical expertise.

To have a panel of non-surgeons and non-specialists passing a non-scientific vote on this, that could affect patient outcome would not be considered safe.

Conditional Against Opioids

Whilst we as a group may not condone opioids in chronic pain as the research suggests, there is absolutely a role for opioids to play in some specific clinical situations under controlled

circumstances. For example, a low stable dose of opioids in a compliant patient, where the opioid has been shown to provide both pain reduction and functional gains without any aberrance. You have made no allowances for any of the nuances that we as specialists manage on a day-to-day basis.

#### Conditional Against Medical Procedure Radiofrequency neurotomy

“The guideline panel suggest that healthcare professionals not use radiofrequency neurotomy (RFN) for the management of people with chronic WAD.”

RFN is not used to treat “chronic WAD”. RFN is however used to treat facetogenic mediated pain that has been confirmed by a series of controlled diagnostic medial branch nerve blocks with low volume local anaesthetic alone. Facetogenic pain can be caused by and/or coexist with chronic WAD. You have not made this distinction at all, which is completely understandable because your panel have no experience or expertise in this specialised area of interventional pain medicine whatsoever.

There are many publications that support RFN in facetogenic pain, which you have not mentioned.

In no particular order, and by no means is this an exhaustive look at RFN and cervicogenic pain, which has been shown in WAD;

- An excellent review by Eseonu and colleagues looking at the utility of facet joint injections in whiplash associated spinal pain notes many important facts [Esenonu 2021]. They reviewed 1856 publications and carefully narrowed the relevant publications down to 14, which focused on injections and nerve ablations. These studies ranged from 2017 to 1993 and were either randomised controlled trials or prospective studies.

Their conclusions were evidence based and stated that the literature supports a single diagnostic medial branch block followed by a therapeutic facet joint ablation for chronic pain in these situations in WAD. They also stated that WAD should be managed in a multidisciplinary fashion, with an early involvement of psychological specialists when required.

For clarity, the facet joint was identified as a pain generator in 50% of cases. They defined the likely anatomical cause of WAD using biomechanical studies that have evaluated facet joint compression and excessive capsular ligament strain and potential injury mechanisms. and summarised a strict protocol of diagnostic medial branch block injections as well as approaches used therapeutic purposes. They also suggested indications for and published results of facet joint ablation in WAD.

- Are you aware of the study by Manchikanti L and colleagues [Manchikanti 2010] that showed therapeutic cervical medial branch blocks instituted after a diagnosis of facetogenic pain, with controlled comparative local anaesthetic blocks with 80% concordant pain relief, repeated approximately 6 times over a period of 2 years, provided significant improvement over a prolonged period of 2 years.

Why would you suggest against therapy that can provide up to 2 years of pain reduction which may allow patient engagement and the facilitation of rehabilitation?

- The Rydman and colleagues' longitudinal study looked at 121 patients with emergency department presentations and having imaging found that moderate facet joint degeneration was associated with nonrecovery [Rydman 2019]. In the group with moderate degree of facet joint degeneration, they noted 69.6% reported nonrecovery compared with 23.6% among patients without any signs of degeneration. They concluded that cervical degeneration, especially facet joint degeneration, would be a risk factor for nonrecovery after whiplash trauma. You have not considered this.

Hence, whiplash trauma can be a trigger for painful manifestation of previously asymptomatic facet joint degeneration, which if not diagnosed and treated would lead to poorer outcomes.

You have made no allowances for this.

- The Malik paper did a literature review and found significant variability in the existing literature concerning WAD in terms of study methodology, definitions of cervical degeneration, and outcome measures [Malik 2021]. They proposed facet joint instability due to facet joint capsule rupture as a potential mechanism for nonrecovery.

Multiple studies have shown cadaveric, biomechanical, and clinically that facet joints are a source of pain in patients with chronic WAD.

You have not considered this.

- Yang and colleagues, assessed the effectiveness of corticosteroid injection into cervical facet joint for managing whiplash-related neck pain [Yang 2010]. They found that cervical facet joint pain is one of the commonest sources of neck pain after a whiplash injury.

They found about 50% of patients reported ongoing neck pain 1 year after a traffic accident and as we know in addition to this chronic pain has been found to be associated with poor prognosis. They stated that the lack of specific interventions to effectively manage whiplash-related cervical facet joint pain, which is often refractory to physical therapy and oral medication, is lacking. They stated that many of these patients with

chronic whiplash-induced cervical facet joint pain have uncontrolled neck pain which can affect both their activities of daily living and occupational performance.

They found whiplash-related chronic cervical facet joint pain was significantly reduced at 1 and 2 months after corticosteroid injection into the joints, with 26.7% of the included patients demonstrating  $\geq 50\%$  pain reduction at 2 months after treatment.

This is without the long-term pain-relieving properties of a carefully selected patient and appropriately performed RFN.

Why would you withhold a therapy that would offer significant pain reduction to these patients while supporting a tailored allied health program?

- We'd like to direct you to these consensus practice guidelines on interventions for cervical spine (facet) joint pain published in Regional Anaesthesia and Pain Medicine in 2022 by a multispecialty international working group.

This group showed that cervical facet joints are the primary source of pain in 26–70% of patients with chronic neck pain and 54–60% of neck pain following whiplash injury.

You have made no mention of this.

This group specifically assessed clinical trials evaluating cervical medial branch RFA after whiplash and has made specific recommendations.

They stated that given the strong evidence that  $< 50\%$  pain relief may be clinically meaningful to patients and the absence of direct evidence that using higher medial branch blocks cut-off thresholds results in higher RFA success rates, recommended that  $> 50\%$  reduction in pain be considered a positive prognostic diagnostic block.

They further stated that there were theoretical underpinnings that in younger individuals ( $< 45$  years of age) with whiplash injuries who are having the C2–3 and or C3–4 facet joint(s) treated, higher cut-offs should be used.

They showed cervical medial branch radiofrequency ablation may provide benefit to well-selected individuals, with diagnostic medial branch blocks with only local anaesthetic to be more predictive than intra-articular injections and that more stringent selection criteria are likely to improve denervation outcomes further.

- We now point you to the Manchikanti and colleagues Comprehensive Evidence-Based Guidelines for Facet Joint Interventions in the Management of Chronic Spinal Pain: American Society of Interventional Pain Physicians (ASIPP) Guidelines Facet Joint Interventions 2020 Guidelines [Manchikanti 2020]. This group stated that the evidence for long-term improvement with cervical radiofrequency neurotomy was Level II with

moderate strength of recommendation, when performed after the diagnosis of cervical facet joint pain with controlled comparative local anaesthetic blocks utilizing 80% pain relief criterion standard.

Your panel has made no mention of this.

- Finally, an interesting study by Smith and colleagues found cervical radiofrequency neurotomy reduced central hyperexcitability and improved neck movement in individuals with chronic whiplash. They found in a small group of patients that cervical RFN attenuated psychophysical measures of augmented central pain processing and improved cervical movement. They considered that this may imply that these central processes could be maintained by peripheral nociceptive input.

What we have demonstrated that is much more to managing WAD than your draft considers or mentions.

## Summary

We as a group suggest you remove this document in its entirety. It is not fit for the purpose for which it was supposedly developed.

If you however choose to use it, we'd suggest you withdraw the document as it currently stands, aim for a full re-write with the appropriate specialist groups represented on your panel. We would be delighted to support you rectify this document.

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Australasian College of Sport and Exercise Physicians (ACSEP)  
The Royal Australian and New Zealand College of Radiologists (RANZCR)  
Australasian Faculty of Rehabilitation Medicine (AFRM)  
Royal Australasian College of General Practitioners (RACGP)  
Neuromodulation Society of Australia and New Zealand (NSANZ)  
Neurosurgical Society of Australasia (NSA) or  
Spine Society of Australia (SSA).

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