Early management of whiplash-associated disorders

**INITIAL ASSESSMENT**

**ASSESSMENT**

History and Physical Examination

**IS AN X-RAY NEEDED?**

Apply Canadian C-Spine rule (see page 17)

**NO**

**YES**

**ASSESS**

Classify WAD grade
- Pain-Visual Analogue Scale (VAS)
- Disability-Neck Disability Index (NDI)
- Expectations of Recovery

**DEFINE WAD GRADE**

- WAD I
- WAD II
- WAD III

**Apply recommended treatments**

- Educate and stay active
- Exercise

Practitioners should review patients regularly, at least at the following intervals: 7 days, 3 weeks, 6 weeks, 12 weeks unless resolved earlier.

**IMMEDIATE REFERRAL TO EMERGENCY DEPARTMENT OR SPECIALIST**

**WAD GRADE IV**

**ASSESS**

Classify WAD grade

- Pain-Visual Analogue Scale (VAS)
- Disability-Neck Disability Index (NDI)
- Expectations of Recovery

**REASSESS**

Should include VAS and NDI

**REASSESS**

Should include VAS and NDI, may include a psychological measure (eg: IES)

**REASSESS**

(Should include VAS and NDI, may include IES)

**REASSESS**

Resolving

- Reduce treatment
- *Resolved: cease treatment

Resolution expected

- Discharge from care in a percentage of cases or intermittent review

**RESOLUTION EXPECTED**

Discharge from care in a percentage of cases or intermittent review

**NOT RESOLVING**

Not resolving

- Refer to clinician with expertise in the management of WAD. Specialist exam should include specialist physical examination and/or psychological examination.

**RESOLUTION EXPECTED**

Follow recommendation from specialist and ensure coordinated care. Follow the chronic pathway as detailed in the NHMRC Clinical guidelines for best practice management of acute and chronic whiplash associated disorders, Nov 2008.

*Resolved is defined at VAS ≤3/10 and NDI <8/50
The flowchart provides a structure for the assessment and treatment of people with WAD during the first 12 weeks following injury. A glossary is available on page 38 of the Guidelines for the management of acute whiplash-associated disorders to assist with interpretation of technical terms and abbreviations. The flowchart offers a summary of how to apply the recommendations in the Guidelines. It is a guide only, as there will always be individual variations.

### Initial assessment

Classify the WAD grade according to the QTF definition. The WAD grade provides a good indication of the severity of the injury. However, also look at the VAS and the NDI. These latter two factors are important because research indicates that they are better predictors of prognosis than the WAD grades. For example, a VAS score greater than 5/10 and an NDI score greater than 15/50 are associated with a poor prognosis. Patients’ expectation of recovery should also be assessed. Expectation of recovery can be assessed by simply asking a patient, “Do you think you are going to get better soon?” Copies of the VAS and NDI and how to score them are available on the MAA website. The working group recommends assessing the VAS scale and the NDI at the seven-day review (see below) to identify WAD sufferers at risk of non-recovery. After the initial assessment recommended treatments should be commenced.

### Review

Health professionals should review patients regularly, at least at the following intervals: seven days, three weeks, six weeks and three months (unless resolution has occurred earlier). Review should include reassessment of the VAS and the NDI. A patient is considered to have improved if there is at least a reduction of 10 per cent on these scales.¹

### Seven-day reassessment

Reassess using the VAS and NDI. If the VAS and NDI are high or unchanged, treatment type and intensity should be reviewed and other recommended treatment options should be considered. This may involve referral for physical therapy. The effectiveness of such treatments should be closely monitored and only continued if there is evidence of benefit (at least 10 per cent reduction in VAS and NDI).

### Three-week reassessment

Reassess using the VAS and NDI. If the VAS and NDI are unchanged, a more complex assessment may need to be considered and treatment type and intensity should again be reviewed. The Impact of Event Scale (IES) may be used as a baseline for psychological assessment. If the VAS and NDI are unchanged, consider referral to a clinician with expertise in the management of WAD. This may include a specialist physiotherapist, specialist chiropractor, musculoskeletal medicine practitioner, rehabilitation physician, pain medicine specialist, psychologist or occupational physician. Amongst other things, if the VAS and NDI are unchanged, the clinician should undertake a more complex physical and/or psychological examination. The clinician should direct more appropriate care and liaise with the treating practitioner to ensure this is implemented. If the symptoms are resolving, treatment should be reduced.

### Six-week reassessment

Reassess again at this point. There should be some resolution of symptoms in at least 40 per cent of cases. In these cases, treatment should be gradually withdrawn. If there is no resolution of symptoms, and the VAS and NDI have not changed by at least 10 per cent from the last review, the patient should be referred to a clinician with expertise in WAD. At this point, referral to a psychologist should also be considered. This is particularly important if the results of the psychological assessment indicate concern (IES score >25 at the six week reassessment).

### 12-week reassessment

Reassess again at this point. There should be complete resolution of symptoms in at least 40 per cent of cases. In these cases treatment should be ceased. If the patient is still improving, continue treatment with a focus on interventions which require active participation and independence (for example, provide patients with home exercise programs that involve active exercises). In these resolving cases, the patient should be reviewed intermittently over the next six to 12 months until resolution, to ensure home programs are maintaining improvement.

### Coordinated care

Patients whose VAS and/or NDI scores are not improving at this point are likely to require coordinated multidisciplinary care. It is likely that a combination of physical, psychological and medical care is required. The primary health care professional should facilitate this process.

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