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NANZ

Neurological Association
of New Zealand
Manaaki roro me ngā io



The Royal
Australian &
New Zealand
College of
Psychiatrists



Post-concussion syndrome

ACC position statement

The vast majority of traumatic brain injuries are mild, and typically cause transient, self-limiting symptoms (Clark et al, 2022). Approximately 20% of people report persistent symptoms at 3 months post-concussion (Thornhill et al, 2000). ACC provides rehabilitation for people who have persisting symptoms caused by concussion regardless of the duration of these symptoms; for a small minority of people these symptoms can persist for many months.

The scientific and clinical community have increasingly recognised that there are multiple factors that influence the persistence of symptoms following concussion, including depression, anxiety, medical comorbidities, psychosocial stressors, and the emergence of other conditions following injury, such as post-traumatic stress disorder, functional neurological symptom disorder, and somatic symptom disorder (Clark et al, 2022).

'Post-concussion syndrome' (PCS) was previously supported as a diagnosis that accounted for persisting symptoms following a concussion. However, the clinical research evidence has increasingly shown PCS to be a non-specific and clinically unhelpful construct. For example, 50% of people with depression who have not sustained a concussion meet the diagnostic criteria for moderate to severe post-concussion syndrome (Iverson, 2006). In response to this clinical research evidence, the diagnosis of PCS has been removed from the latest versions of the Diagnostic and Statistical Manual of Mental Disorder (DSM-5) and the International Classification of Diseases (ICD-11). The preferred term to describe ongoing symptoms is now 'persisting concussion symptoms', and associated diagnoses now include 'mild neurocognitive disorder' and 'neurocognitive disorder due to traumatic brain injury'.

These symptoms can present differently across people who have sustained similar concussion injuries, with multiple potential maintaining factors that require careful assessment of the affected person to inform appropriately targeted treatment.

ACC considers that post-concussion syndrome is an unhelpful and out-dated clinical construct. Our view is that there are risks inherent in continuing to diagnose clients with this condition, not least that disabling symptoms will be misattributed to this condition rather than to potentially reversible medical, psychological, or psychiatric factors that remain undiagnosed and untreated. Consequently, ACC no longer accepts 'post-concussion syndrome' as a covered injury. Where clients/patients have persisting symptoms that clinicians consider are caused by concussion, the appropriate covered injury would be 'concussion'. Symptoms that persist beyond three months are most appropriately described as 'persisting concussion symptoms.'

This position statement has been endorsed by the Neurological Association of New Zealand (NANZ), the New Zealand Special Interest Group in Neuropsychology (NZSIGN), the Rehabilitation Medicine Society of Australia and New Zealand (RMSANZ), The Royal Australian & New Zealand College of Psychiatrists (RANZCP) and The Royal New Zealand College of General Practitioners (RNZCGP).

References:

- Clark, C.N., Edwards, M.J., Eng Ong, B., et al (2022). Reframing postconcussional syndrome as an interface disorder of neurology, psychiatry, and psychology. *Brain*, **145**, 1906-1915.
- Iverson, G.L. (2006). Misdiagnosis of the persistent postconcussion syndrome in patients with depression. *Archives of Clinical Neuropsychology*, **21**, 303-310.
- Thornhill, S., Teasdale, G.M., Murray, G.D., et al (2000). Disability in young people and adults one year after head injury: Prospective cohort study. *British Medical Journal*, **320**, 1631-1635.