

No diagnosed

concussion

Clinically

recovered

TOOL 1.3: Manage Acute and Prolonged Concussion Symptoms Algorithm

Initial medical assessment

(Physician or Nurse Practitioner)

- Clinical history, physical examination, determine need for imaging
- Rule out more severe traumatic brain injury (TBI), structural spine injury, neurological/medical causes of concussion-like symptoms (Sidebar 1: Symptom attributes)
- Post-injury education and guidance
- Assess any modifiers that may delay recovery and consider early referral to interdisciplinary team
- Arrange follow-up in 1-2 weeks to re-assess clinical status

Diagnosed concussion

Medical follow-up and referral to healthcare professionals/interdisciplinary concussion team

(1-4 weeks following acute injury)

- Re-assess post-concussion symptom severity, functional status, worsening or new symptoms, return to school/activity/sport status
- Focused history, physical examination, determine need for imaging (depending on nature of prolonged symptoms)
- Complete a psychological assessment (Sidebar 2)
- Post-injury education and guidance, recommend additional assessments or accommodations if symptoms worsen or fail to improve
- Assess any modifiers that may delay recovery and consider early referral <4 weeks post acute injury
- Refer to interdisciplinary concussion team or appropriate sub-specialist if symptoms last longer than 4 weeks (or sooner as needed/using clinical judgment)
- Arrange frequent clinical follow-up while awaiting for consultation
- See guideline sections for specific post-concussion symptoms

Not yet recovered > 4 weeks prolonged symptoms

Specialized therapy/ interdisciplinary concussion team

- Medical assessment by physician with expertise in concussion
- Adjunctive testing
- Interdisciplinary management
- Targeting/symptom specific care

Adapted with permission from the Ontario Neurotrauma Foundation Standards for Post-Concussion Care -Post Concussion Care Pathway

Suspected structural brain or spine injury

Immediate referral

Neurosurgery or emergency department

Modifiers that may delay recovery (Sidebar 3) - high risk of prolonged postconcussion symptoms

Links to Recommendations:

- 1: Recognition and Directing to Care
- 2: Initial Medical Assessment and Management
- 3: Medical Follow-up
- 4: Medical Clearance: Full-contact sport or high-risk activity
- 5: Sport Concussion Considerations
- 6: Headache
- 7: Sleep
- 8: Mental Health
- 9: Cognition
- 10: Vision/vestibular/oculomotor
- 11: Fatigue
- 12: Return-to-School and Work

SIDEBAR 1

> Symptom Attributes

- · Duration, onset, triggers, location
- Intensity and impact
- Perception of symptoms
- · Impact on functioning
- Previous episodes
- Previous treatment and response

SIDEBAR 2

> Psychosocial Evaluation

- Support system
- Mental health history
- · Comorbid conditions (chronic pain, mood/stress/personality disorder)
- Substance use disorder
- Absence from school or academic difficulties

SIDEBAR 3:

Modifiers That May Delay Recovery:

- Age (increases with age)
- Sex (female)
- · Personal and family history of migraines
- · History of learning or behavioural difficulties
- Personal and family history of mental health
- Family socioeconomic status/ education
- High pre-injury symptom presentation



Medical

clearance to

return to

full-contact

sport and high

risk activities