Algorithm 7.1

Assessment and Management of Sleep-Wake Disturbances Following mTBI

**Assessment**

Every person with mTBI who has identified sleep problems should be screened for sleep-wake disturbances (see Appendix 7.2 and 7.3), such as insomnia or excessive daytime sleepiness.

Screen for medical conditions, current medication use, comorbid psychopathology, and risk factors for sleep disturbances (see Table)

All patients with persistent sleep-wake complaints should be placed on a sleep hygiene program (see Appendix 7.4) in addition to other interventions.

**Pharmacological Treatment**

If medications are to be used, ensure they do not produce dependency and that they have minimal adverse effects for mTBI patients. The aim is to establish a more routine sleep pattern (Sidebar 1).

Consider Daily Supplements
magnesium, zinc, melatonin

**Do sleep disturbances persist?**

*Yes*

Is there a suspicion of sleep-related breathing disorders, nocturnal seizures, periodic limb movements, or narcolepsy?

*Yes*

Refer for sleep specialist consultation (ideally one with experience with mTBI and polysomnography).

*No*

*No*

**Non-Pharmacological Treatment**

Cognitive Behaviour Therapy (CBT)
The treatment of choice for either primary insomnia or insomnia comorbid to a medical or psychiatric condition.

Is CBT unavailable to the patient or is the patient waiting for CBT treatment?

*Yes*

Behavioural recommendations of sleep restrictions and stimulus control can be implemented with weekly monitoring of the patient for the first few weeks (Appendix 7.5).

*No*

Was CBT successful?

*Yes*

*No*

Other Treatment Options
Acupuncture, exercise, mindfulness-based stress reduction, magnesium and zinc supplementation

Continue to treat and monitor sleep-wake disturbances. Refer for sleep specialist consultation (ideally one with experience with mTBI and polysomnography) if unable to manage sleep disturbances.

Sidebar 1: Medications
Potential Medication Options – short-term basis only
1. Trazodone
2. Mirtazapine
3. Tricyclic antidepressants (amitryptyline)
4. Prazosin (for PTSD + nightmares)

Avoid benzodiazepines

Note: Non-benzodiazapine medications (zopiclone, eszopiclone) may have fewer adverse side-effects.

For a narrative description and guideline recommendations related to this algorithm, please refer to Section 7.