Fact Sheet

Information for General Practitioners:
Temperature regulation after spinal cord injury (SCI)

This fact sheet outlines:
- The causes and clinical presentations of temperature dysregulation following SCI
- How to access the Medical Cooling and Heating Electricity Concession Scheme

Background:
Temperature regulation may be affected by a SCI. Body temperature is controlled by the autonomic nervous system via hypothalamic regulation. In SCI, there is generally reduced sensory input regarding temperature received from below the level of injury. People with SCI (at the level of T6 and above) also lack the descending sympathetic control to respond appropriately to environmental changes in temperature. As a result, patients may experience high or low body temperatures.

Temperature dysregulation can occur acutely following SCI and can persist for a lifetime. People with higher levels of injury and complete injuries are more likely to experience issues.

People with SCI can also experience sweating disturbance (with or without core temperature dysregulation) as a result of autonomic dysfunction. The most common pattern is increased sweating above the level of injury and minimal/no sweating below the level of injury.

Thermoregulation:
There are several patterns of temperature dysregulation. These include:
1. High or low temperature secondary to environmental exposure
2. Fever without infectious source (more common in the first weeks to months after injury)
3. Exercise-induced hyperthermia

It is vital to exclude medical causes (such as infection or thromboembolic disease) for high or low temperature. People with SCI are at particular risk of infections of the chest, renal tract or skin.

People can manage temperature dysregulation by controlling the temperature of their environment, dressing in appropriate clothing and regulating exertion with exercise.

Medical Cooling and Heating Electricity Concession Scheme:
The Queensland Government offers a Medical Cooling and Heating Electricity Concession Scheme. This scheme is designed to support people who require close regulation of body temperature to prevent worsening of their medical condition.

A medical specialist must confirm a patient qualifies for this scheme based on prescribed medical criteria. Patients with SCI above T6 level may qualify if they have autonomic system dysfunction in addition to loss of regulation of sweating or severe immobility.

How to access to specialist medical advice:
In an emergency, patients should attend their nearest hospital emergency department. For urgent advice after hours, the on-call spinal rehabilitation consultant/Registrar can be contacted through the Princess Alexandra Hospital switchboard. For non-urgent SCI issues, the Spinal Outreach Team can be contacted on (07) 3176 9507 or the Spinal Injuries Outpatient Department on (07) 3176 5789 during business hours. Clients who require an outpatient appointment but have not been seen for over 12 months require a new referral via the Metro South Central Referral Hub. GPs can now register to access their patients’ Queensland Health records via the Health Provider Portal.

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