Post-Sepsis Syndrome A Guide for General Practitioners







Introduction

Post-sepsis syndrome (PSS) is an umbrella term used to describe a complex of new morbidities accompanying a sepsis event.

This guide offers an overview of PSS and its management. For more information on management and support for sepsis survivors, visit www.sepsis.org.nz, or email support@sepsis.org.nz

Sepsis is the body's life threatening response to infection

Understanding Post-Sepsis Syndrome:

Sepsis (mate whakatāoke), or "blood poisoning" (toto pirau), is a life threatening illness caused by infection.

Many people recovering from sepsis have pre-existing morbidities which predispose to infection, or which have been made worse by sepsis and its treatment. However, it is important to recognise PSS as a distinct complication of sepsis. This is because distressing PSS symptoms can last for months or even years after the successful treatment of an infection and its underlying cause.



The specific *new* findings in PSS can be categorised as: physical, psychological, or neurocognitive. ("brain-muscle-mind").

These problems are specific to the inflammatory and post-inflammatory responses underlying a sepsis illness.

Brain - damage to the blood-brain barrier affecting the normal function of the brain.

Muscle - loss of striated muscle mass due to mitochondrial dysfunction and myocyte apoptosis.

Mind - recovery from delirium and psychological responses to critical illness.



Examples of PSS Symptoms and Signs

Brain

- Cognitive fatigue.
- Difficulty concentrating and processing information.
- Problems with sleep (including disruption of normal circadian rhythms and nightmares).

Muscle

- Fatigability and weakness.
- Muscle and joint pain.
- Problems with swallowing.
- Breathlessness (not attributable to underlying lung damage).

Mind

- Risk of acute and post-traumatic stress disorder
- Problems with mood
- Irritability

Other problems common amongst sepsis survivors

- Limb swelling.
- Re-hospitalisation. Hair, skin, and nail problems
- Recurrent infection. Residual organ dysfunction
 - Inability to participate in work and social activities



Assessment and Diagnosis

You should be aware of the potential for PSS in patients who have been discharged from hospital with a sepsis diagnosis, or an infection with evidence of organ failure be aware that many people who have had sepsis do not receive this diagnosis whilst in hospital.

Signs that sepsis may have been present

- Emergency surgery for infection.
- Intensive care unit (ICU) admission.
- High-dependency (HDU) admission.
- Prolonged intravenous (IV) antibiotic therapy.
- New physical or cognitive deficits at discharge.
- New renal or cardiac failure.

There is no single screening tool for PSS, but the constellation of symptoms and signs is easy to spot once you think of muscle strength ("feel stink"), cognitive disturbance ("can't think), and the psychologic effects of a life-threatening illness or ICU/HDU admission. Whilst some of these symptoms may seem understandable after hospitalisation, they are unusually severe and prolonged in PSS.



Management of PSS

- Validate and raise awareness of sepsis as a specific health problem order leaflets and posters for your clinic rooms and waiting areas.
- Discuss the diagnosis of sepsis and provide written information.
- <u>www.sepsis.org.nz/what-is-sepsis/</u>
- Anticipate and assess for common PSS symptoms and signs
- Coordinate medical and rehabilitation with local agencies, including ACC.
- Diagnose and treat symptoms of acute stress disorder.
- Encourage a gradual return to physical activities such as walking or swimming
- Discuss pain management, including pharmaceutical and non-pharmaceutical strategies
- Consider referral to a sepsis support specialist or support group <u>https://www.sepsis.org.nz/get-support/</u>



For more information, visit www.sepsis.org.nz