

New steps needed to combat unfolding sepsis threat

Tuesday, September 9

Q and A

What is Sepsis?

Sepsis is the life-threatening condition that arises when the body's response to an infection damages its own tissues and organs. It can lead to shock, failure of multiple organs, and death. Organ failure and death are more likely if sepsis is not recognized early and not treated promptly.

How do people get it? Do you just catch it in hospitals?

Sepsis results from an infection which may arise in the lungs, urinary tract, skin, abdomen or other part of the body. The most common causes of sepsis are respiratory infections, abdominal infections (such as can arise from a perforated bowel or from kidney or gall stones) and urinary infections. Sepsis may occur in patients both in the community and those already being treated in hospital.

How widespread is it?

It affects at least 30,000 people in Australia each year and causes about 7,500 deaths, or around 20 deaths each day.

What are the signs?

Common symptoms of sepsis are fever, chills, rapid breathing and heart rate, rash, confusion and disorientation. Many of these symptoms, such as fever and difficulty breathing, mimic other conditions, making sepsis hard to diagnose in its early stages.

Should patients' families be aware of the signs so they can alert the doctor or nurse? Do they have a role in prevention/getting patients to treatment immediately?

Anyone showing signs of sepsis should seek medical treatment immediately.

Do doctors know enough about sepsis? If not, what is being done about this?

All doctors and nurses are aware of sepsis but the diagnosis can be difficult. For that reason the NSW CEC launched a program to increase awareness of sepsis within hospitals and many individual doctors are working both to reduce the incidence of sepsis and to improve outcomes for those who contract it.

How do you prevent it?

The best way to prevent sepsis is to prevent the infection that causes it. All public hospitals and day procedure services in Australia are required to implement systems and processes to prevent and control healthcare associated infections as part of the National Safety and Quality Health Service Standards.

How do you treat it?

People with sepsis are treated in hospital and those with severe sepsis are usually treated in the intensive care unit. Treatment targets the infection, while supporting vital organs and giving intravenous fluids and drugs to maintain blood pressure. In severe cases when organs fail, life-support treatments such as artificial ventilation (breathing machine) or kidney dialysis, may be necessary. Surgery may be needed to control a local site of infection such as in appendicitis or following a perforated bowel.

Does everyone who gets it end up in an intensive care unit (ICU)?

No, although anyone with sepsis that does not improve rapidly or resolve quickly should be referred to an intensive care unit

If you survive, what damage does the body sustain?

Many people who survive severe sepsis recover completely and return to normal lives. Some people, especially those who have required prolonged treatment in an ICU may experience longer term problems including permanent organ damage.

Other longer term effects include difficulty sleeping, concentrating or returning to work, reduced energy and musculoskeletal problems.

Is there an approximate cost to the healthcare system of sepsis?

The CEC has estimated that over the next 10 years sepsis-related condition will cost NSW \$3.7 billion

What previous research has been carried out on sepsis? What did it find?

There has been a vast amount of research and billions of dollars spent but at present there is no drug treatment proven effective for sepsis. Treatment with steroids remains controversial and The George Institute is conducting the largest ever trial of that treatment. The research tells us that the best way to improve survival is either to prevent sepsis or to recognise it as early as possible and treat with antibiotics and fluids.

What gaps are there? What additional research needs to be carried out?

Gaps include whether steroids improve outcome and whether sepsis can be reliably recognised using simple diagnostic signs. Answering these questions would allow treatment to begin earlier, for example in the ambulance or immediately on arrival to hospital.

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