Intermountain® Healthcare

Sepsis

What is sepsis?

Sepsis is a serious, whole-body response to an infection. Also called **systemic inflammatory response syndrome (SIRS),** sepsis causes inflammation and blood clotting that decreases blood flow to the limbs and vital organs.

Sepsis is classified into four stages: sepsis, severe sepsis, septic shock, and MODS (multiple organ dysfunction syndrome). It becomes increasingly life-threatening as it progresses from sepsis to more severe stages. It requires aggressive medical treatment in a hospital.

What causes sepsis?

Sepsis is triggered by infection from a bacteria, virus, parasite, or fungus. The infection might be limited to one area of the body, as with a tooth abscess, or can be widely spread through the bloodstream. A doctor will order tests to locate the source of the infection, but even with this testing, the cause of sepsis often remains unknown.

Although anyone can develop sepsis, it's more likely to affect the following:

- **The very old or the very young** (for example, premature babies)
- **People whose immune systems are already weakened** because of illness, injury, or medication
- **Patients who are undergoing certain medical treatments** (such as chemotherapy for cancer) or who have tubes or lines in their body to deliver or drain fluids
- **People who are addicted** to alcohol or drugs

Severe sepsis requires medical treatment in a hospital intensive care unit (ICU).

What are the symptoms?

To diagnose sepsis, doctors check symptoms and laboratory test results. Common symptoms include an infection with the following:

- **Temperature higher or lower than normal**
- **Fast heartbeat**
- **Fast breathing**
- **Very high or very low number of white blood cells** (white blood cells are the parts of your blood that find and fight infection in the body)

If the condition progresses, blood pressure drops and vital organs (such as the kidneys or liver) may begin to fail.

How is sepsis treated?

Sepsis is treated with antibiotics given intravenously (IV, or "through the vein"). A patient with sepsis may also need other treatments to support failing organs, for example, dialysis to support the kidneys or a ventilator to help with breathing.

What can we expect from treatment?

If you have a loved one being treated for sepsis in the ICU, it may help to know what to expect:

- **Numerous tubes and lines.** These help monitor the patient's condition, deliver medication and fluids, and draw or drain fluids. For example, a large IV line in the neck is common. So is a line in the wrist to measure arterial blood pressure and obtain blood samples.
- **Swollen face or body.** Swelling is due to the extra fluid given to boost blood pressure.
- **Numerous machines.** Some of these machines simply monitor the patient's condition. Others, such as ventilators or dialysis machines, may support failing organs.
- **Confusion.** Sepsis decreases blood flow to the brain, which disorders the patient's thinking and hampers the ability to communicate.

Will our loved one respond to treatment?

Sepsis is a serious condition, and its outcome can be difficult to predict. **Your loved one's doctor is the best source of information about what the future may hold.** A number of different factors affect how a patient responds to treatment:

- **When sepsis was detected and treatment was begun.** In general, early diagnosis and treatment improves a patient's chance of recovery.
- **Whether the underlying infection is known and can be effectively treated with medication.** Some infections are resistant to antibiotics.
- **The patient's overall condition.** The patient's basic health and strength before sepsis are also important.

What can we expect from recovery?

Sepsis can come on quickly, but recovery is slow and gradual. It nearly always requires days — or even weeks. As your loved one's health improves, the number of lines, tubes, and machines used for daily care will gradually decrease. Some medications may no longer be needed. If your loved one has been in the ICU, there will be a transfer to another unit in the hospital as health improves.

Beyond the ICU, the focus of care will shift to building strength. (Time spent in bed weakens people significantly.) When your loved one's health and strength have improved enough, the medical team will arrange a release from the hospital.

What can we do to help?

It's stressful when a loved one faces a serious illness like sepsis. To help you feel less helpless — and perhaps more hopeful — keep in mind these ways you can support treatment:

- **Help your loved one rest.** It can be difficult to rest in the busy hospital environment, but you can help by dimming the lights, keeping the TV off or on low volume, and limiting visitors.
- **Communicate with the healthcare team.** Please speak up if you or your loved one needs anything. Report anything unusual. Ask questions. We will do everything we can to help your loved one heal — and to care for you, as well, during this time of treatment.
- **Take care of yourself.** You are an important part of your loved one's care team. It's important for you to get rest, good nutrition, and time for yourself. This will help you support your loved one. Take breaks as you need them, and let us know how we can help you.

Questions for the care team: _____

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