

## GANGRENE

### What is gangrene?

Gangrene is a condition that happens when tissue dies. Gangrene may be caused by conditions that stop blood flow, or a bacterial infection. Blood flow to tissues may be stopped by a blood clot or narrowed blood vessels. Bacteria may get into tissue through an incision or a wound, such as a burn, gunshot, or ulcer. Gangrene most commonly affects the hand, fingers, arm, foot, toes, or leg. Gangrene is a life-threatening condition that needs immediate treatment.

### What increases my risk for gangrene?

- Diabetes
- Peripheral artery disease
- Conditions that cause your blood to clot easily
- Conditions that cause a weak immune system, such as HIV
- Severe frostbite
- IV drug abuse
- Cancer

**What are the signs and symptoms of gangrene?** Gangrene usually begins with fever, pain, and swelling. The pain and swelling usually get worse quickly. The area of dead tissue may look brown, red, purple, or black. It may drain red or yellow fluid that smells bad.

### How is gangrene diagnosed and treated?

Doctor will examine the area and take a sample of tissue. The tissue will be tested for bacteria. A blood sample may also be collected and tested for bacteria.

### How is gangrene treated?

Gangrene is treated with surgery to remove the dead tissue. In severe cases, part of arm or leg may also be removed. Patient may be given antibiotics to treat an infection and medicine to decrease pain and fever. Conditions that cause poor blood flow will also be treated. After surgery, patient may need hyperbaric oxygen (HBO) therapy. HBO therapy helps the tissue heal by increasing blood flow and preventing the infection from getting worse. If the infection spreads to the rest of body, patient may need other treatments.

### How can we prevent gangrene?

- **Care for all wounds and incisions as directed.** Always wash hands before and after we touch wound or incision. Use soap and water or an alcohol-based hand rub. Carefully wash around the wound or incision with soap and water. Dry the area and put on new, clean bandages as directed. Change your bandages when they get wet or dirty.
- **Manage other health conditions.** This includes diabetes, peripheral artery disease, and problems with blood clotting. These conditions can increase your risk for wound infections.
- **Seek care immediately for symptoms of a blood clot or poor blood flow.** Symptoms of a blood clot include an arm or leg that feels warm, tender, and painful. It may look swollen and red. Symptoms of poor blood flow include an arm or leg that is cold, pale, or numb.

**Reference:** Micromedex's Care Notes System Online 2.0