Gangrene

Alice,

What is gangrene? I know it's an infection; how fast can it spread?

Answer

Dear Reader,

You're right - gangrene is caused by an infection. Gangrene can happen when a cut or surgical wound becomes infected with bacteria (usually Strep, Staph, or Clostridia). The bacteria can spread under the skin to neighboring areas or through the bloodstream to cause a total body infection. Some of these bacteria make poisons (toxins) that flow into the body, destroying tissues and causing severe illness. These surrounding tissues or infected organs can actually die as a result of the infection.

Sometimes gangrene occurs when the blood supply to a particular part of the body is cut off. This means that part of the body (maybe a loop of the intestine or a finger or toe) can't get any oxygen. When the body's tissues go without oxygen for too long, they die as a result of the infection.

You asked how fast gangrene can spread. Unfortunately, it can spread amazingly quickly. You may have read the sensational headlines about "flesh-eating bacterial" that splashed onto the news scene a few years ago. This is a form of gangrene caused by the same strep bacteria that causes strep throat. These bacteria can infect a seemingly minor cut or scrape and spread extremely rapidly. Within a day or so, large areas of tissue need to be surgically removed to prevent the infection from becoming fatal. Luckily, these galloping infections are pretty rare.

People who get gangrene often have other medical conditions that keep them from fighting off infection or that block blood circulation, such as:

- Diabetes
- Blocked blood vessels
- Burst appendix
- Crush injuries
- Burns
- Frostbite
- Hernia
If someone has gangrene, s/he'll notice some severe symptoms, including:

- An area of redness and swelling around a wound that grows rapidly larger
- Skin flaking off over the affected area
- Shiny, tight skin over the affected area
- Severe pain at first (although once the tissues have died, s/he'll just notice numbness in the area)
- Frothy or clear fluid leaking from the area; fluid- or blood-filled blisters
- Beet red or chalky white skin at first; the color sometimes progresses to a deep black when the tissues are completely dead and are decomposing
- A terribly sickening, putrid smell
- A crackly, puffy sensation of gas gathering underneath the skin in the infected area

If the infection has spread throughout the person's body, s/he might have:

- Fever and chills
- Nausea and vomiting
- Severe weakness
- Dizziness
- Rapid heart rate
- Confusion

Gangrene is often treated by an operation to remove the dead tissue. If it's an area of tissue that can be removed, the operation is called "debridements." If it's an arm, leg, hand, foot, finger, or toe, it's called an "amputation."

Other treatments include antibiotics (usually intravenously, through a needle in a vein), hyperbaric oxygen therapy (in which very high pressures of pure oxygen are used to treat the gangrenous area), and blood thinners (to make sure that blood clots don't form). If you think you might have gangrene, or any type of infection, it's a good idea to see a health care provider.

All-in-all, gangrene is a serious, life-threatening condition. Whenever you have a cut or scrape, make sure that you clean it carefully and use whatever kind of antibiotic ointment your health care provider recommends. If you've had surgery, be certain to follow instructions about how to care for/bandage your incision(s). And, any time you notice an injury or surgical wound that seems to be getting redder, more swollen, and/or more painful rather than improving, see your health care provider immediately.
Appendicitis [7]
Does soap kill germs? [8]
How do wounds, cuts, scrapes, lacerations heal? [9]

Resources

Medical Services (Morningside) [10]
Medical Services (CUMC) [11]

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