Flesh-Eating Disease Encyclopedia Article

Flesh-Eating Disease

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Flesh-Eating Disease Encyclopedia Article.....1

Contents.....2

Flesh-Eating Disease.....3

Flesh-Eating Disease

Flesh-eating disease is more properly called necrotizing fasciitis, a rare, sometimes fatal condition in which bacteria destroy tissues underlying the skin. This tissue death, called necrosis or gangrene, spreads rapidly. Flesh-eating disease is an infection that appears to devour body tissue. Media reports increased in the mid-1990s, but the disease was described by **Hippocrates** more than 3,000 years ago and reported during the Civil War. There are two types of flesh-eating disease: Type I, which is caused by anaerobic bacteria, with or without the presence of aerobic bacteria; and Type II, also called hemolytic streptococcal gangrene, which is caused by group A streptococci and may include other bacteria. It may also be called synergistic gangrene. Flesh-eating disease most often affects arms and legs, but can appear anywhere. In nearly every case, a skin injury precedes the disease. As bacteria grow beneath the skin's surface, they produce toxins which destroy superficial fascia, subcutaneous fat, and deep fascia. In some cases, the dermis and the underlying muscle are also affected. Initially, the infected area appears red and swollen, and feels hot and painful. Over the course of hours or days, the skin may become blue-gray, fluid-filled blisters may form, and the area becomes numb. An individual may go into shock and develop dangerously low blood pressure. Multiple organ failure may occur, quickly followed by death.

The appearance of the skin, paired with pain and fever, raises the possibility of flesh-eating disease. An x ray, magnetic resonance imaging (MRI), or computed tomography scans (CT scans) of the area reveals a feathery pattern in the tissue, caused by gas in the dying tissue. Necrosis is seen during surgery to collect samples to identify the bacteria. Rapid, aggressive medical treatment, specifically, antibiotic therapy and surgical debridement, is critical. Antibiotics include a penicillin, an aminoglycoside or third-generation cephalosporin, and clindamycin or metronidazole. Analgesics are used to control pain. During surgical debridement, dead tissue is stripped away. After surgery, patients are rigorously monitored for continued infection, shock, or other complications. If available, hyperbaric oxygen therapy can also be used. Flesh-eating disease has a fatality rate of about 30%. **Diabetes**, arteriosclerosis, immunosuppression, kidney disease, malnutrition, and obesity are connected with a poor prognosis. Older individuals and intravenous drug users may also be at higher risk. The infection site also has a role. Survivors may require **plastic surgery** and may have permanent physical disability. Flesh-eating disease cannot be prevented.