



Risk Factors and Differential Diagnosis of Cellulitis a Bacterial Infection in Adults

Nancy Cory*

Department of Emergency Medicine, University of Melbourne, Melbourne, Australia

DESCRIPTION

Cellulitis is typically caused by a bacterial infection of the skin's inner layers. It specifically affects subcutaneous fat and the dermis. One of the warning signs and symptoms is an area of redness that gets bigger over a few days. The skin may be puffy, and the edges of the redness are frequently not well defined. While pressure frequently causes the redness to turn white, this isn't always the case. The infected site is typically uncomfortable. Lymphatic vessels may occasionally be affected, and the patient may experience fatigue and a fever. The legs and face are the most commonly affected areas, but cellulitis can occur anywhere on the body. The leg is frequently impacted after a skin break. Age, leg edema, and obesity are additional risk factors. A breach in the skin is not typically seen before face infections.

Streptococci and *Staphylococcus aureus* are the most often implicated microorganisms. In contrast to cellulitis, erysipelas is a bacterial infection that affects the skin's more superficial layers. It manifests as a red patch with distinct borders and more frequently goes along with a fever. While a cell culture is infrequently achievable, the diagnosis is typically made based on the signs and symptoms that are present. Other severe infections like an underlying bone infection or necrotizing fasciitis should be ruled out before making a diagnosis. Typically, oral antibiotics like cephalexin, amoxicillin, or cloxacillin are used as a form of treatment. Erythromycin or clindamycin may be prescribed in place of penicillin for those who are allergic to it. Other suggested medications include doxycycline or trimethoprim/sulfamethoxazole when Methicillin-Resistant *S. Aureus* (MRSA) is a concern. The existence of pus or prior MRSA infections are of concern. Painkillers and elevating the affected region might be helpful. Cellulitis frequently manifests as a painful, hot, and irritated region. Cellulitis can affect anyone, but the adults and those with compromised immune systems are particularly at risk. Due to immune system impairment, diabetics are more prone to cellulitis than the general population.

Cellulitis in the feet is particularly dangerous because it affects blood circulation in the legs and can result in diabetic foot or

foot ulcers. When blood glucose levels are poorly managed, germs can develop more quickly in the damaged tissue, which speeds up the infection's course if it gets into the bloodstream. As these ulcers may not be painful due to diabetes-related neural degeneration, they frequently become infected. Those with poliomyelitis are also more susceptible due of circulation issues, particularly in the legs. Infection risk is also increased by immunosuppressive medications and other immune-suppressing diseases or infections. Blisters from shingles and chickenpox frequently burst open, leaving a skin breach through which bacteria can enter. Another risk factor is lymphedema, which results in swelling in the arms and/or legs. Cellulitis is also a risk factor for conditions that impair blood flow to the legs and feet, such as chronic venous insufficiency and varicose veins.

In densely populated areas with shared restrooms and living spaces, such as military posts, college dormitories, nursing institutions, oil platforms, and homeless shelters, cellulitis is also widespread. Deep vein thrombosis, which can be identified with a compression leg ultrasound, and stasis dermatitis, which is skin inflammation caused by inadequate blood flow, are two other disorders that may mimic cellulitis.

Purple bullae, skin sloughing, subcutaneous edema, and systemic toxicity are indicators of a more serious infection that would require quick surgical intervention, such as necrotizing fasciitis or gas gangrene. Sometimes, musculoskeletal findings that are related are described. The syndrome is known as the follicular occlusion trio or tetrad when pilonidal cysts, hidradenitis suppurativa, and acne conglobata co-occur. Cellulitis and Lyme disease can both be misdiagnosed. Lyme disease does not usually cause the recognisable bullseye rash. Recent exposure to an area where Lyme is common in the outdoors and a rash at a location uncommon for cellulitis, such as the armpit, groin, or behind the knee, are factors that support Lyme. Lyme disease can also have long-term neurologic side effects. Cephalexin, the typical cellulitis medication, is ineffective for treating Lyme disease. The IDSA advises cefuroxime axetil or amoxicillin/clavulanic acid as treatments since they are efficient against both infections when it is unclear which one is present.

Correspondence to: Nancy Cory, Department of Emergency Medicine, University of Melbourne, Melbourne, Australia, E-mail: Nancor@yahoo.com

Received: 03-Mar-2023, Manuscript No. JPC-23-20516; **Editor assigned:** 06-Mar-2023, PreQC No. JPC-23-20516 (PQ); **Reviewed:** 20-Mar-2023, QC No. JPC-23-20516; **Revised:** 27-Mar-2023, Manuscript No. JPC-23-20516 (R); **Published:** 03-Apr-2023, DOI: 10.35248/2573-4598.23.9.218

Citation: Cory N (2023) Risk Factors and Differential Diagnosis of Cellulitis a Bacterial Infection in Adults. J Pat Care. 9:218.

Copyright: © 2023 Cory N. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.