Cellulitis inflammation of connective tissue

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Cellulitis is a localized or diffuse inflammation of connective tissue with severe inflammation of dermal and subcutaneous layers of the skin. Cellulitis can be caused by normal skin flora or by exogenous bacteria, and often occurs where the skin has previously been broken. Skin on the face or lower legs is most commonly affected by this infection, though cellulitis can occur on any part of the body. The mainstay of therapy remains treatment with appropriate antibiotics, and recovery periods last from 48 hours to six months. The typical symptoms of cellulitis are an area which is red, hot, and tender. Cellulitis is caused by a type of bacteria entering the skin, usually by way of a cut, abrasion, or break in the skin. This break does not need to be visible. Streptococcus and Staphylococcus are the most common of these bacteria, which are part of the normal flora of the skin, but normally cause no actual infection while on the skin's outer surface. Diabetics are more susceptible to cellulitis than the general population because of impairment of the immune system; they are especially prone to cellulitis in the feet, because the disease causes impairment of blood circulation in the legs, leading to diabetic foot/foot ulcers. Poor control of blood glucose levels allows bacteria to grow more rapidly in the affected tissue, and facilitates rapid progression if the infection enters the bloodstream. Neural degeneration in diabetes means these ulcers may not be painful and thus often become infected. Those who have suffered poliomyelitis are also prone because of circulatory problems, especially in the legs. Immunosuppressive drugs, and other illnesses or infections that weaken the immune system, are also factors that make infection more likely. Chickenpox and shingles often result in blisters that break open, providing a gap in the skin through which bacteria can enter. Diseases that affect blood circulation in the legs and feet, such as chronic venous insufficiency and varicose veins, are also risk factors for cellulitis.

Diagnosis: Cellulitis is most often a clinical diagnosis, and local cultures do not always identify the causative organism. Blood cultures usually are positive only if the patient develops generalized sepsis. Conditions that may resemble cellulitis include deep vein thrombosis, which can be diagnosed with a compression leg ultrasound, and stasis dermatitis, which is inflammation of the skin from poor blood flow. Associated musculoskeletal findings are sometimes reported. When it occurs with acne conglobata, hidradenitis suppurativa, and pilonidal cysts, the syndrome is referred to as the follicular occlusion triad or tetrad. Treatment consists of resting the affected area, cutting away dead tissue, and antibiotics (either oral or intravenous). Flucloxacillin or dicloxacillin monotherapy (to cover staphylococcal infection) is often sufficient in mild cellulitis, but in more moderate cases, or where streptococcal infection is suspected, then this course is usually combined with oral phenoxymethylpenicillin or intravenous benzylpenicillin, or ampicillin/amoxicillin.

Biography

Ramesh Kumar had completed his M.Sc in Bio-chemistry from Osmania University. During his master’s he had collected blood samples from different patients who is suffering from various diseases. He had completed B.Sc Biotechnology from Kakatiya University.

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