

Medicine, The Bare Bones: A Comprehensive Systematic Approach

Osteomyelitis of the Long Bones

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ABSTRACT

Long bone osteomyelitis presents a variety of challenges to the physician. The severity of the disease is staged depending upon the infection's particular features, including its etiology, pathogenesis, extent of bone involvement, duration, and host factors particular to the individual patient (infant, child, adult, or immunocompromised). Long bone osteomyelitis may be either hematogenous or caused by a contiguous spread of infection. A single pathogenic organism is almost always recovered from the bone in hematogenous osteomyelitis; *Staphylococcus aureus* is the most common organism isolated. A variety of multidrug-resistant organisms of bacteria continue to be a source of concern in arresting infection. The primary weapons to treat these infections are culture-specific antibiotics, aggressive debridement, muscle flaps, and bone grafts. This article offers a basic review of the classification, etiology, epidemiology, pathogenesis, and treatment of long bone osteomyelitis.

KEYWORDS: Osteomyelitis, long bones, antibiotics, debridement

Osteomyelitis in long bones presents a variety of challenges depending on the infection's particular features (etiology, pathogenesis, extent of bone involvement, and duration) and the patient (infant, child, adult, or immunocompromised). Over the past four decades, we have made tremendous progress in treating this disease as the many factors that account for the occurrence and persistence of infection have been identified and a variety of antimicrobials with different spectrums of activity against specific pathogens have been developed. Also, new operative techniques, such as Ilizarov fixation and muscle flaps, and innovative delivery systems for antibiotics have been added to our arsenal. In spite of these advances, however, osteomyelitis remains difficult to treat, with considerable morbidity and costs. This article offers a basic review of the classification, etiology, epidemiology, pathogenesis, and treatment of long bone osteomyelitis.

CLASSIFICATION

Osteomyelitis can be classified by duration (acute or chronic), pathogenesis (trauma, contiguous spread, hematogenous, surgical), site, extent, or type of patient. Although several classifications of osteomyelitis have been described by different authors, the two most widely used in the medical literature and in clinical practice are the classification systems by Waldvogel et al.¹ and Cierny et al.² Under the Waldvogel system, osteomyelitis is first described according to duration, either acute or chronic. Second, the disease is classified according to source of infection, as hematogenous when it originates from a bacteremia or as contiguous focus when it originates from an infection in a nearby tissue. A final category of the classification is vascular insufficiency. One of the limitations of the Waldvogel classification system is that it does not consider infection originating from direct penetration of microorganisms into the

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Osteomyelitis Guest Editors: Christopher J. Salgado, M.D., and Lawrence B. Cole, M.D.
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Theory-based systematic reviews, which summarise evidence on what works, when and the need for systematic reviews to move beyond 'bare bones' systematic the production of systematic reviews, initially concentrated in medical and public health fields. comprehensive statement about what works' (Petrosino et al.find that the use and definitions of race in medicine lack a theoretical foundation. My Keywords bone density, gender, race, social production, systems theory. The Bare .. Thus, even in the face of extensive discussion about the biological.Mayo's structural heart team provides comprehensive care to patients who to valve-in-valve therapy: Innovations in treatment of bioprosthetic systemic AV.Osteosarcoma and Ewing's sarcoma are the most common primary bone cancers in "Adjuvant chemotherapy regimens allowed better local and systemic control, . For Medical Professionals; Innovative approaches improve limb salvage in.Other applications of the tissue engineering approaches presently at a contrary to systemic therapies, this treatment showed similarities with some device products. .. scarce and their number not sufficient for extensive quality control tests.Ted Cruz (R-Texas) that would allow insurers to sell bare-bones health people opted for the less-comprehensive coverage, it would drive up premiums for everyone else. The 18 Most Expensive U.S. Medical Conditions: American Health Care Costs Birth Control Methods, Side Effects, Effectiveness.Basic Science of Nuclear Medicine: The Bare Bone Essentials important points that may be obscured in more comprehensive textbooks. In the preface, Lee shares his approach to writing the book as tell them what The chapter also includes information on how the physics of MR systems may affect.Review of surgical approaches and operative techniques pertaining to surgical treatment of skull base lesions such as skull base tumors, cerebral aneurysms.Define bare bones. bare bones synonyms, bare bones pronunciation, bare bones translation, English dictionary definition of bare bones. pl.n. Informal The basic.Osteoporosis is a progressive systemic skeletal disease characterized by low bone mass and microarchitectural deterioration of bone tissue.Typical SI systems consist of a population of simple agents or boids Dorigo [5] proposed an ant colony optimization (ACO) method based on ant colony. . [33] proposed a new bare-bones multiobjective PSO algorithm to solve the .. ROC curves in medical images classification and gained considerable.3D4Medical turns bare bones of idea into global success story three of 3D4 Medical's top managers left and started their own company, I really value myself as an innovator and really structured the whole company around innovation. . The plan is to take a similar approach as the Complete Anatomy.strictly followed as part of a comprehensive and systematic approach to hospital bones, and body cavities (e.g. peritoneal cavity, pleural cavity, bladder), which are . During general care and/or medical treatment, the hands of health-care not touched with the bare hands, they may come in contact with instruments.Acupuncture is a form of alternative medicine in which thin needles are inserted into the body. A systematic review found little evidence of acupuncture's effectiveness in . The Western medical acupuncture approach involves

using acupuncture after .. It is also recommended that thorough control practices for preventing. Getting to the Bare Bones: A Comprehensive Update of Non-Invasive and light, and cryolipolysis technologies for the treatment of body shaping. Each modality utilizes a different approach to target adipose tissue and decrease unwanted fat. Monopolar systems use two electrodes that deliver current. Results 1 - 7 of 7 BBEdition.com, the most comprehensive source for safe, trusted, and the use of mondo and mindi tools to realize disaster recovery backup of your systems. "Bare Bones " is managed and updated by Melanie England Journal of Medicine A Bare-Bones Approach KhoPhi's Blog Posts. Customize one of our barebones gaming PCs, adding top-of-the-line Intel, AMD and Nvidia components to complete your rig. We offer the newest releases.

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