Title: Infection: Concerning Trends for the Chiropractor

Total length: 4 hours (delivered in 4 roughly one-hour segments)

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Not all back and joint pain is the result of benign, mechanical musculoskeletal syndromes. Every so often there are patients who, despite our best efforts, fail to appropriately respond to our care. In those few situations we must rule out the possibility the patient's symptoms are due to serious conditions like tumor or infection. It isn't easy to know there is a more concerning underlying problem before we adjust/treat this type of patient. Which makes our recognition of their response to our care so important. This presentation includes cases of misdiagnosis and a delay in proper management. This class will take a close look at the common causes of osteomyelitis and septic arthritis; plus the concerning rising trend of resistant strains. This is a class you can't afford to miss since the focus is on conditions you can't afford to miss for your patient's well-being.

Hour 1

- I. Introduction
- II. Subcategories of osteomyelitis
 - a. Suppurative
 - b. Non-Suppurative
 - c. Fungal
- III. Background of osteomyelitis and septic arthritis
 - a. Pathogenesis
 - b. Why is it so dangerous?
 - c. Common Pathogens
- IV. Routes of delivery to bones and/or joints
 - a. Hematogenous
 - b. Contiguous spread
 - c. Direct inoculation
 - d. Post-surgical
 - Presentations
 - a. Children
 - b. Adults

Hour 2

VII.

V.

- VI. Opportunistic organisms and unusual features
 - a. Clostridium perfringens
 - b. Pseudomonas
 - c. Streptococcus
 - d. Salmonella
 - Case study: Discitis
 - a. Presentation
 - b. Missed diagnosis
 - c. Course of disease and recovery

- VIII. Causes of OM and septic arthritis
- IX. Misc. cases

Hour 3

- X. Case study: MRSA
 - a. Evolution of the case presentation
 - b. Complicated by inadequate history taking and limited exam
 - c. Classic features of OM
 - d. Negative planar images sometimes require advanced imaging
- XI. A closer look at the identification of MRSA as a clinical entity
 - a. Explore reasons for the emergence of MRSA
 - b. Proper workup and management of MRSA
- XII. Short term and long term outcomes

Hour 4

- XIII. When the body successfully defends itself
 - a. Brodie's abscess defined
 - b. Classic patient complaint
- XIV. Imaging findings
 - a. Planar images
 - b. Bone scan/SPECT
 - c. MRI
- XV. Tuberculosis
 - a. TB has long been a problem for humans
 - b. Latent versus active
 - c. Classic presenting features
 - d. Upper lobe disease
 - e. Ghon focus
- XVI. Histoplasmosis- our endemic fungal infection
 - a. Classic presenting features
 - b. Most common imaging findings
 - c. Cases of Histoplasmosis imitating other diseases
- XVII. The end