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## Comments on “Cutaneous Abscess as a Complication of Bisphosphonate-Related Osteonecrosis of the Jaw” by Yang et al.

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Dear Editor:

Yang et al.<sup>1</sup> recently reported an interesting case entitled, “Cutaneous Abscess as a Complication of Bisphosphonate-Related Osteonecrosis of the Jaw”.

Bisphosphonate-related osteonecrosis of the jaw (BRONJ) represents a rare complication of bisphosphonate treatment. This condition is characterized by necrosis of the maxilla and mandible<sup>2</sup>. *Actinomyces* species (spp.) are gram-positive, non-acid fast, filamentous bacteria and mostly are facultative anaerobe. These species are commensals of the mucosa of mouth, colon and vagina. The key step in pathogenesis of actinomycosis is mucosal disruption by trauma, surgical procedures, or foreign bodies<sup>3,4</sup>. *Actinomyces* spp. are considered to be important agents involved in the pathogenesis of BRONJ. One of the clinical manifestations of actinomycosis is oral cervicofacial disease which can present as large abscess with or without mandibular osteomyelitis, ulcer or mass lesion. The diagnosing of cervicofacial actinomycosis is by histological examination and culture of abscess pus or suspected bone specimen, if osteomyelitis is considered. The microscopic study for visual-

ization of gram positive, non-acid-fast, thin, branching filaments are helpful. Culture for isolation may take up to 2 to 4 weeks and this note should be considered. The demonstration of sulfur granules in pus or pathologic section of surgical specimens is also helpful and diagnostic. The treatment of choice is penicillin with or without surgical therapy especially for abscess drainage and resection of necrotic bone in cases of osteomyelitis and osteonecrosis. The agents that should be avoided for treatment are metronidazole, aminoglycosides, anti-staphylococcal penicillin such as cloxacillin and first generation of cephalosporin<sup>5</sup>. Hence; the diagnosis of cervicofacial actinomycosis should always be considered in any painless mass at jaw and also in the differential diagnosis of any lesion in neck and head for appropriate management.

Yang et al.<sup>1</sup> described bacterial culture of skin tissue revealed gram positive cocci (*Streptococcus constellatus*). Also they reported that fungal and mycobacterial cultures were both negative, but authors have not mentioned that study of the specimen in this case for detecting actinomyces had performed or not. The diagnosis of actino-

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mycosis is important in selecting the appropriate treatment in patients with cervicofacial mass or abscesses.

### **CONFLICTS OF INTEREST**

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The author has nothing to disclose.

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