

Actinomycotic Osteomyelitis of the Mandible Following Hemodialysis: Report of a Case

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Abstract: Mandibular osteomyelitis due to actinomycosis following hemodialysis is a particularly rare occurrence.

The patient was a 69-year-old female on her sixth year of hemodialysis. She had undergone chemotherapy for malignant lymphoma for 6 months until 3 months before her initial visit to the clinic.

Her right lower second molar was initially treated by root canal at a private dental clinic to address her cheek pain. Thereafter, her symptoms gradually worsened, and she later was referred to this clinic. She was diagnosed to have a right acute perimandibular abscess and therefore was hospitalized on the day she presented. She had been undergoing chemotherapy and drainage in the right lower buccal gingiva of the molars. The extraction of the right lower second molar and curettage were performed after the acute inflammation resolved.

She experienced two flare-ups of the subcutaneous abscess of her right cheek at two months and five months after the first discharge. Curettage and sequestrectomy of the right mandibular marrow were performed to resolve the inflammation. The third surgery for mandibular osteomyelitis revealed sequestrum from the body via the ramus to the right mandibular condylar head and an actinomycotic colony in the sequestrial lesion was also identified.

The patient had renal osteodystrophy due to the relative long-term hemodialysis and low level immunity after the chemotherapy of the malignant lymphoma. The osteomyelitis explained the infection with not only the usual oral bacteria, but also actinomyces following three rounds of surgical treatment for the infection in the subcutaneous cheek region and the bone marrow of the mandible.

Key words : Actinomycosis, Mandibular Osteomyelitis, Long-term Hemodialysis, Renal Osseous Dysplasia