Facial Actinomycosis in a Renal Transplant Patient

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Dear Sir,

Renal transplant patients have an increased susceptibility to infections which continues to be one of the leading causes of death at any point in the posttransplant course [1].

We present the case of a cervicofacial actinomycosis in a renal transplant patient.

A 52 year-old renal-transplanted woman was admitted because of a 2-month history of facial mass. She had received a cadaveric graft 2 years before. Maintenance immuno-suppressive therapy consisted of prednisone (10 mg/day), cyclosporine (70 mg/day) and azathioprine (100 mg/day).

On admission, she was found to have a violaceous painless fluctuating lesion at the anterior angle of the right mandible, which was 2 cm in diameter. She denied any recent dental manipulation. Suppuration was absent. She was afebrile and her general condition was good. Physical examination was unremarkable. Investigations revealed: hemoglobin, 15 g/dl; leukocytes, 7,800/mm³ with normal differential; platelet count, 298,000/mm³; plasma creatinine, 1.6 mg/dl, serum urea, 66 mg/dl. Chest and cranial X-ray were normal. A biopsy of the lesion showed an intense, purulent inflammatory reaction involving superficial and deep portions of the specimen. In the center of the abscesses, surrounded by fibrosing granulation tissue, there were organized aggregates of filaments, with the characteristic appearance of actinomy-cotic granules. Granules consisted of baso-philic masses bordered by a radial corona of eosinophilic, club-like Splendore-Hoepli

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Fig. 1. Actino-mycotic granule composed of a baso-philic aggregate of filaments, surrounded by numerous neutrophils. HE. ×200.

material (fig. 1). Individual filaments within the granule were not visible in HE-stained sections. With tissue gram stain, numerous, delicate gram-positive filaments appeared within the granules, which were non-acid-fast stained.

The patient was treated with intravenous penicillin G for 4 weeks (16 million U/day) followed by oral amoxicillin (2.2 g/day) for 3 months with total healing of the lesion.

Actinomyces israelii is a gram-positive, anaerobic, non-acid-fast bacteria. This is a common saprophyte in saliva, lacrimal and salivary ducts, tonsillar crypts, lower respiratory and digestive tracts. Minor oral trauma or

tooth caries constitute entry doors. One-half of the patients usually present with a cervicofacial disease. Abdominopelvic and pulmonary forms are less common [2,3].

We present a typical case of cervicofacial actinomycosis in a renal-transplanted woman. To the best of our knowledge this infection has not been reported previously in this population. In non-immunosuppressed patients, treatment consists of high-dose penicillin for 4 weeks followed by oral amoxicillin for 3 months. Although the treatment schedule in the immunosuppressed host has not been established, Fry et al. [4] recently reported a good outcome after a short course of

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0028-2766/94/

0681-0149\$8.00/0

therapy in 2 immunocompromised patients. In any case, it seems reasonable to continue treatment as long as there is inflammation.

In summary, actinomycosis must be considered in any facial mass which appears in a transplant patient. The high susceptibility of *Actinomyces* to antibiotics is a good reason for thorough searching and treatment thereof.

References

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