Actinomycosis is an infectious disease with a world-wide distribution caused by anaerobic and microaerophilic bacteria residing in the oral cavity [1]. Actinomycosis is often difficult to diagnose as it can mimic numerous infectious and noninfectious diseases. It is nowadays uncommon in Europe and the possibility that we may face a patient with actinomycosis is therefore underestimated.

Recently we have seen a 29-year-old woman, at 30 weeks' gestation, in good health, with a 5 weeks' history of painful and a progressively growing swelling in the right cheek region. The patient's medical history was noncontributory. Physical examination revealed an indurated painful nodule in the lateral right cheek. The overlying skin was reddened, edematous and tender on palpation. Routine blood tests were normal. The patient underwent ultrasonography (US) which revealed an oval hypoechogeneous dishomogeneous mass, approximately 3.0 × 1.0 cm in size in the right cheek. Fine needle aspiration cytology (FNAC) was effective for diagnosis, but it was consistent with actinomycosis. The patient underwent treatment with oral penicillin, for two months. There were not any complications in pregnancy or delivery due to this disease, and in this moment the patient is completely disease free.

Cervicofacial actinomycosis is the most common form of this rare disease. In cervicofacial actinomycosis, the sites most commonly involved include the submandibular space, cheek, parotid gland, teeth, tongue, nasal cavity, gingival and oral space [1]. There is a slight male prevalence in young adults and there is no racial predisposition or geographic factors. Actinomycosis is an endogenous infection, there is no person to person transmission [2]. Actinomycosis usually occurs in immunocompetent persons but may occur in persons with diminished host defenses. Poor dentition and recent dental manipulation, chronic tonsillitis, otitis and mastoiditis are important risk factors for these infections. Debilitating and immunosuppressing factors like diabetes, pregnancy, steroid therapy or cancer are the predisposing factors [3].

External trauma may result in the introduction of Actinomyces species into head and neck tissues. Cervicofacial actinomycosis may extend to the underlying mandible or facial bones, leading to the development of periostitis or osteomyelitis. Numerous clinical manifestations of the disease have been describe. Actinomycosis is mostly found in young adults, women are less frequently affected than men.

The diagnosis of the cervicofacial form on clinical examination alone is difficult at the onset, unless the physician is aware of it [2]. The diagnosis of actinomycosis is made most accurately by isolating Actinomyces species in cultures of clinical specimens. However, the demonstration of actinomycotic granules in exudates or in histological sections of tissues not connected to hollow organs in strongly supportive of the diagnosis. Differentiating diagnosis includes carcinoma, abscess, congenital anomalies, tuberculosis, fungal diseases and osteomyelitis [4].

FNAC is the method of choice for diagnosis of actinomycosis [1] and penicillin is the drug of choice [3] for prolonged treatment, usually administered for 2 to 12 months [1]. There are no specific measures for preventing actinomycosis, however, maintenance of good personal orodental hygiene, and in particular, removal of dental plaque, may reduce the density if not the incidence of colonization and low-grade periodontal infection with Actinomyces species [1].

References