



Cutaneous and pulmonary botryomycosis

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A 55-year-old homeless man with cachexia and sepsis presented to our outpatient clinic in Magdeburg, Germany. The patient presented with a non-specified lesion of the oral cavity that had grown continuously over the past 2 years. Due to persistent lockjaw, food intake now was nearly impossible. During the previous 6 months the skin of his face and left shoulder had developed erosions and had become atrophic and superinfected with signs of neoangiogenesis (figure). As a result of skin adhesions he had developed head and neck inclination.

Further clinical examination revealed large swellings of the axillary lymph nodes. A subsequent CT scan showed axillary and pulmonary lesions that were interpreted as metastases. Histopathological analyses did not identify any signs of malignancy but showed an acute dermal inflammation with numerous granules containing numerous cocci surrounded by an eosinophilic matrix with club-like projections, known as Splendore-Hoeppli phenomenon (appendix). The granules were consistent with the diagnosis of a botryomycosis. Further histological, immunological, and microbiological analyses (enzyme-linked immuno-blot fungal and mycobacterial culture) excluded other infectious aetiologies including atypical mycobacteriosis, tuberculosis, and actinomycosis.

The patient was treated for 14 days with systemic clindamycin (300 mg) and rifampicin (300 mg) three times a day. His skin lesions, head and neck inclination, and lymph node swelling improved substantially within the 14-day treatment period (appendix).

Botryomycosis is a chronic bacterial infection of the skin and viscera also known as granular bacteriosis, actino-bacillosis, or bacterial pseudomycosis. In most cases, botryomycosis is caused by *Staphylococcus aureus* but other pathogens including *Pseudomonas aeruginosa* or *Escherichia coli* have been described. In systemic disease, botryomycosis mainly occurs in the lungs but can also affect the liver, kidneys, and brain. Immunocompromised patients with diabetes, HIV infection, or cystic fibrosis are prone to develop botryomycosis. Alcoholism, as observed in this patient, is a further risk factor in addition to trauma and surgery. The continuous progression and systemic spread of the disease is often mistaken as a malignant process.

Contributors

SB-S, MA, TT, and EG treated the patient. IF did histopathological analyses. SB-S and EG wrote and revised the manuscript.

Declaration of interests

We declare no competing interests.



Figure: Cutaneous botryomycosis of the face and left shoulder

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See Online for appendix