Facial bullous cellulitis caused by acute sinusitis

A 54-year-old woman was admitted to our clinic with erythema, pain, and a bullous lesion on her right cheek that had developed the previous night (Figure 1). Her body temperature was 37.2°C. Laboratory findings were as follows: white blood cell count 15 x 10^9/l, C-reactive protein 48 mg/dl (normal value <5 mg/dl), and erythrocyte sedimentation rate 36 mm/h; the remaining results were within the normal range. She had no history of trauma or chronic disease. Physical examination revealed tenderness and warmth on her right cheek, and a purulent exudate was observed on rhinoscopy. She complained of headache and rhinosinusitis of five-days duration, so a paranasal sinus computed tomography (CT) scan was performed. The CT scan revealed opacification of the right maxillary and ethmoid sinuses (Figure 2), and the patient was diagnosed with right facial bullous cellulitis caused by severe right maxillary sinusitis. A dental examination and a new CT scan were also performed to exclude a dental infection, and no dental abscess or disease was observed. The patient underwent functional endoscopic sinus surgery. The ostium of the right maxillary sinus was extended by antrostomy, the pus was drained, and cultures obtained. Parenteral ampicillin/sulbactam and ciprofloxacin were initiated empirically. No organism was obtained from cultures. On the fourth day of treatment, erythema and tenderness regressed. She was discharged from hospital and prescribed oral antibiotics for six weeks for possible osteomyelitis.

Acute sinusitis is a common disorder that may affect a great number of people. Complications of paranasal sinus infections are rarely seen and most often involve the orbit and periorbita. Orbital ampicillin/subactam and ciprofloxacin were initiated empirically. No organism was obtained from cultures. On the fourth day of treatment, erythema and tenderness regressed. She was discharged from hospital and prescribed oral antibiotics for six weeks for possible osteomyelitis.
Conflict of interest: No conflict of interest to declare.

References