

## Demolition Site: Rhinotillexomania



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### PRESENTATION

Nose picking is an unattractive practice, but it rarely alters nasal architecture. An 82-year-old woman proved an exception. She was referred to our otolaryngology clinic after experiencing excessive nasal crusting and recurrent nosebleeds for a few months. In addition, she reported subjective hyposmia, but she was otherwise healthy and had no other complaints and no history of trauma. Her medical history was significant for generalized anxiety disorder, which was treated with alprazolam.

### ASSESSMENT

A physical examination revealed that the patient had a saddle nose (**Figure 1**). Nasal endoscopy displayed a complete loss of the nasal septum, the middle turbinates, and the ethmoidal sinuses on both sides. Computed tomography (CT) of the head (bone and contrast-enhanced sequences) confirmed the endoscopic findings (**Figure 2**) and ruled out the presence of facial or intracranial tumoral lesions. Several biopsies of the nasal cavity showed nonspecific inflammation. Results from a battery of laboratory tests, including a complete blood count, erythrocyte sedimentation rate, and cytoplasmic antineutrophil cytoplasmic antibody titers were all normal.

### DIAGNOSIS

Upon further interrogation, the patient eventually admitted that she was worried the nasal crusts would completely obstruct her nose, making it difficult to breathe. Thus, she spent a substantial amount of her time picking her nose (**Figure 3**). This condition is known as rhinotillexomania.

This term comes from the Greek language: *rhino* (nose) plus *tillein* (to pull) plus *exo* (out) plus *mania* (madness or frenzy).

While in most cases nose picking represents a benign habit, it can cause intranasal destruction when the practice is extreme, and as in our patient, it can be the manifestation of an underlying psychiatric disorder.<sup>1-3</sup> Intranasal destructive lesions secondary to psychiatric disorders should be considered an elimination diagnosis. Indeed, the patient with this type of injury to the nasal cavities requires a detailed evaluation, including a complete clinical history and thorough



**Figure 1** The patient had a saddle nose.

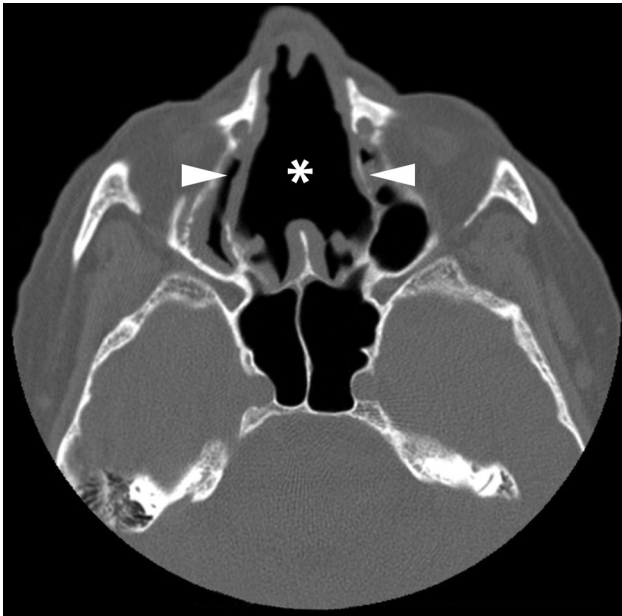
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**Figure 2** Computed tomography of the midface displayed the empty nasal cavity. The asterisk denotes the missing septum, while the arrowheads indicate opened ethmoidal sinuses.

physical examination, as the potential causes are very diverse.<sup>4</sup>

Similar damage is possible with facial trauma, infections, such as local manifestations of syphilis, use of intranasal drugs, particularly vasoconstrictors like cocaine, or following nasal or sinus surgery. Tumors, especially T-cell tumors and malignant fibrous histiocytomas, can cause intranasal destruction as well. Recurrent fever, cough, hemoptysis, arthralgia, myalgia, conjunctivitis, episcleritis, and skin rash can be symptoms of an underlying systemic disease. For example, rhinological signs usually appear first in Wegener's granulomatosis. Other inflammatory diseases, like relapsing polychondritis, Churg-Strauss syndrome, sarcoidosis, or idiopathic midline destructive disease, must be excluded. Prompt evaluation is necessary as early diagnosis can, in some cases, radically change the outcome.<sup>4</sup>

## MANAGEMENT

The patient underwent a psychiatric evaluation, which identified her behavior as an element of her generalized anxiety disorder. Citalopram, 40 mg per day, and regular sessions of cognitive behavioral therapy clearly reduced her



**Figure 3** The patient ultimately admitted to excessive nose picking.

anxious symptoms. Local improvement was also observed after she began rinsing her nose with salt water and applying a soothing ointment. Currently, the intranasal lesions are stable, and the patient has presented with only a few mild nose bleeds.

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