Palatal perforation from cocaine abuse

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A 54-year-old man presented with a 23-year history of intranasal cocaine use. Over the 3 months prior to consultation, he had noticed mild hypernasal speech and velopharyngeal insufficiency evidenced by nasal regurgitation of solid and liquid oral intake. He admitted that these symptoms impaired his social life. On examination, a 6 x 6-mm perforation of the midline hard palate was present (figure). In addition, a large sepal perforation without saddle-nose deformity was noted.

Head and neck complications of cocaine use are well documented. The most well-known complication is septal perforation, which occurs in approximately 5% of intranasal cocaine users. Epistaxis, chronic rhinitis, hyposmia, palatal perforation, midface destruction, decreased mucociliary transport, and nasal infection have all been documented to occur secondary to cocaine abuse.

The mechanisms by which cocaine causes its destructive effects include local ischemia secondary to vasoconstriction, inflammation caused by chemical adulterants put in “cut” cocaine, and infection secondary to trauma, decreased local immunity, and impaired mucociliary transport.

In addition to cocaine abuse, the differential diagnosis of palatal perforations includes trauma, inhalation of other narcotics, midline lethal granuloma, Wegener granulomatosis, malignancy, and infection caused by tuberculosis, tertiary syphilis, leishmaniasis, mucormycosis, actinomycosis, diphtheria, or leprosy.

Several options exist for the treatment of palatal perforations. For definitive surgical reconstruction, local advancement and/or rotation flaps can be used in a fashion similar to the techniques used for cleft palate repairs. Local flaps that have been used include neighboring mucoperiosteal flaps, tongue flaps, temporalis muscle flaps, and buccal fat-pad grafts. For more destructive lesions, a microvascular free flap, with or without bone, may be necessary. In cases in which surgery is contraindicated or refused, the fistula can be closed with an obturator. We had planned to repair our patient’s perforation with local mucoperiosteal flaps, but he failed to keep his surgical appointment and was lost to follow-up.

References

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