

# Using Dental Implant and Guided Bone Regeneration for the Closure of Oroantral Communication

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## \_Abstract

Several methods have been recommended for the late closure of oroantral fistulas; including different types of mucosal flaps and monocortical bone graft. This report introduces a promising and unique method for the immediate and delayed closure of chronic oroantral communications by using a tapered screw-vent implant with guided bone regeneration (Fisiograft) for closure of the oroantral communication. Six month postoperatively, a stable osseointegrated implant developed and a complete closure of the bony defect was established.

## \_Introduction

Oroantral fistula, a pathological communication between the maxillary sinus and the oral cavity, may occur as a result of tooth extraction, trauma, osteomyelitis and syphilis, with tooth extraction being the most common etiologic factor.<sup>1</sup> Sinus perforation will heal spontaneously if treated adequately at the time they occur. If the patient has healthy sinus, an oroantral communication of less than 4–5 mm will most likely heal spontaneously.<sup>1,2</sup> Prescribing systemic antibiotics and topical decongestants is imperative at the time of acute injury. Maxillary sinusitis is present when an untreated communication has persisted for more than 48 hours.<sup>1</sup> Surgical closure of an antral communication is indicated if the opening is over 4–5 mm in size at the time of injury. If the opening has a history of sinus disease, closure of the perforation is indicated even the opening is less than 4 mm.<sup>1,2</sup> The aim of management is not only to close the opening, but also to treat the underlying sinus pathology.