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## **Zer-004**

## Light beam aid to the removal of foreign body in the maxillary sinus. A technical innovation on surgery and implantology

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The aim of this study was to evaluate a new investigation technique in maxillary sinus using a light in cable the photosphere for auxiliary inspection. Photosphere is a light source device used as a head focus, often used by surgeons to obtain a suitable focus of light from the operative field. During some procedures of surgical inspection of the maxillary sinus, it is common cases that there is difficulty of direct visualization of some structures, thus, the need arose to bring the light closer to the operative field in order to reduce the amplitude of the focus and allow the light enter into the maxillary sinus. Thus, it were selected three different cases that used this device with the same application to assist the localization for removal of the foreign body from within the maxillary sinus. Case report: (1) Male patient, 79 years old, with history of sinusitis caused by a dental root impelled into the maxillary sinus after attempted extraction. (2) Female patient, 40 years old, with history of an implant impelled into the left maxillary sinus after installed. (3) Female patient, 43 years old, victim of firearm injury, with the projectile housed inside the left maxillary sinus about 5 years ago. These cases were forwarded to the maxillofacial surgery team of FOA-UNESP. Images exams were performed and at tomographic examination, it was possible to identify the exact location of the foreign bodies inside the maxillary sinus, in addition, in all cases it was observed moderate sinusopathy associated. In all these cases, the surgical procedure consisted at the antrotomy, however, due to the limited view inside the sinus and the position of the foreign bodies in the middle of the purulent lining, for a precise location it was decided to use the light beam provided from an adapted conventional photosphere. Therefore, this technique is an useful artifice for this purpose, allowing shorter surgical time and lower patient morbidity.

**Descriptors:** Dental Implants; Maxillary Sinus; Adaptation, Ocular.