

# Two Window Design for Safe and Predictable Maxillary Sinus Augmentation – Case Series

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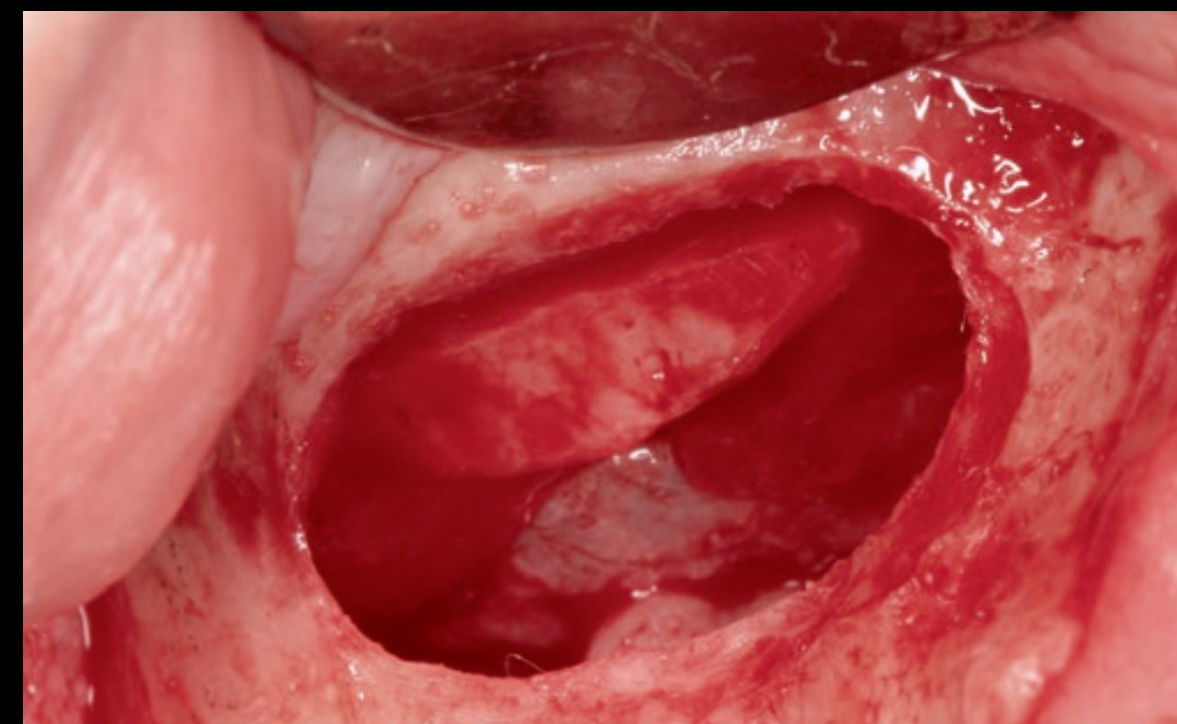
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## ABSTRACT

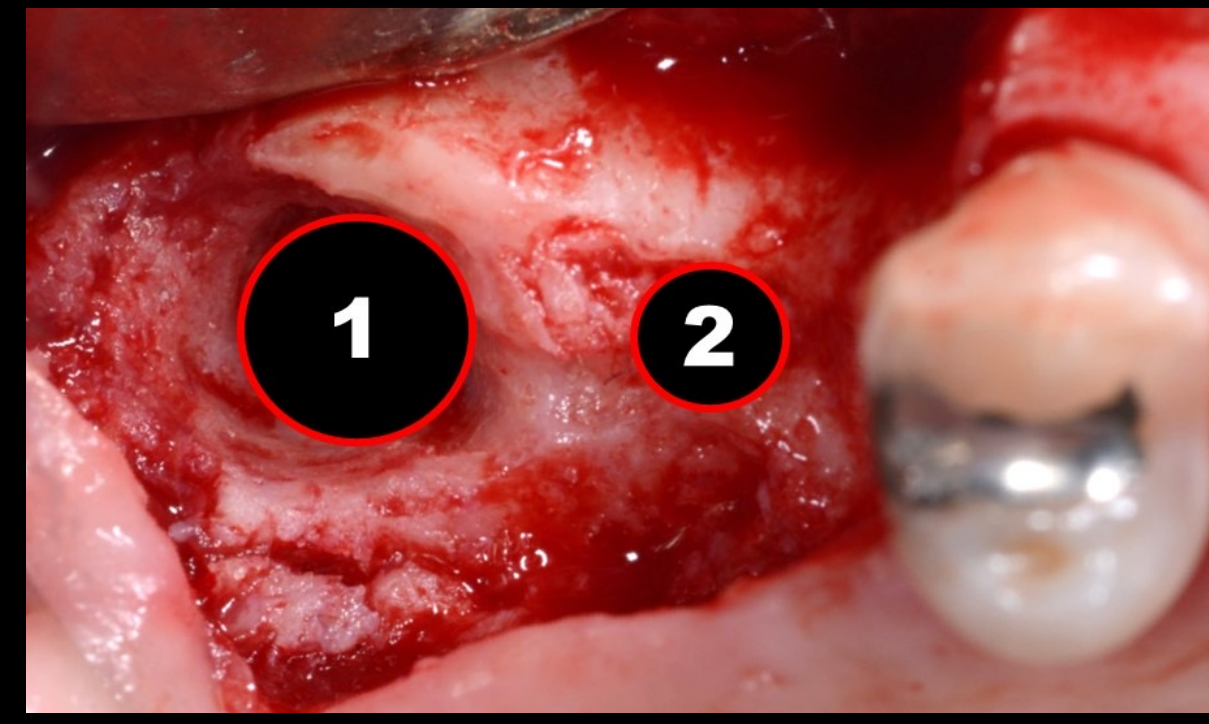
An edentulous area in posterior maxilla can be challenging for implant placement because of the presence of the maxillary sinus. To achieve adequate bone height, various sinus augmentation techniques may be performed. One of those includes the lateral window technique which is a conventional and predictable approach. The first surgical step in performing a sinus augmentation with a lateral window approach is window design. A number of window designs have been documented. The window is designed to achieve

maximum accessibility to the sinus. Oftentimes, a specific window design is required to achieve sinus access and prevent possible complications. A two window design technique can be used to overcome anatomical limitations including the presence of the alveolar antral artery and sinus septa. The purpose of this presentation is to demonstrate the advantages of a two window design technique, in performing a Maxillary Sinus Augmentation (MSA).

## CLINICAL SIGNIFICANCE



The window is designed to achieve maximum accessibility to the sinus

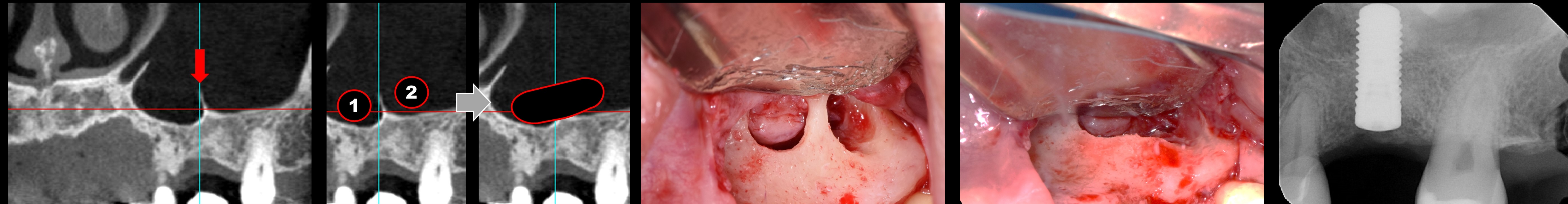


A two window design technique can be used to overcome anatomical limitations: the presence of the alveolar antral artery, pre-existing defect, and sinus septa

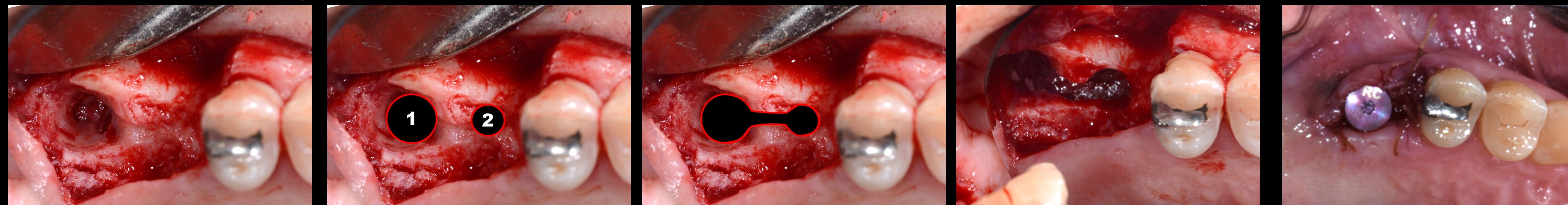
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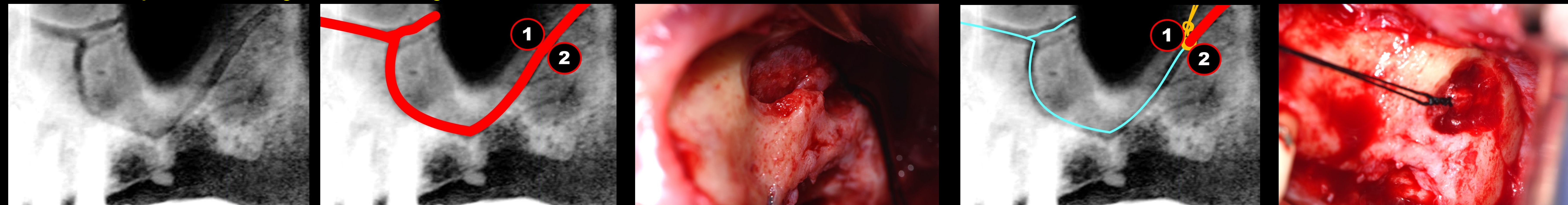
### Two windows to avoid perforation due to septum



### Two windows when there is already one window due to defect or to avoid lateral window due to intraosseous anastomosis



### Two windows to prevent bleeding with arteriole ligation



### Two windows to increase vital bone formation

