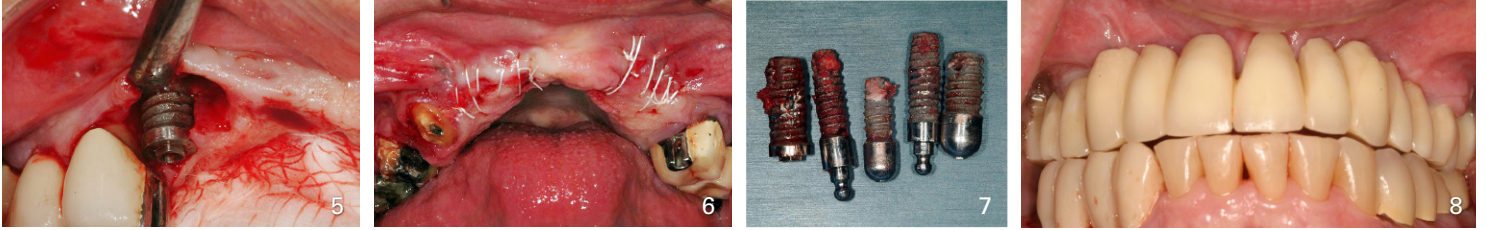
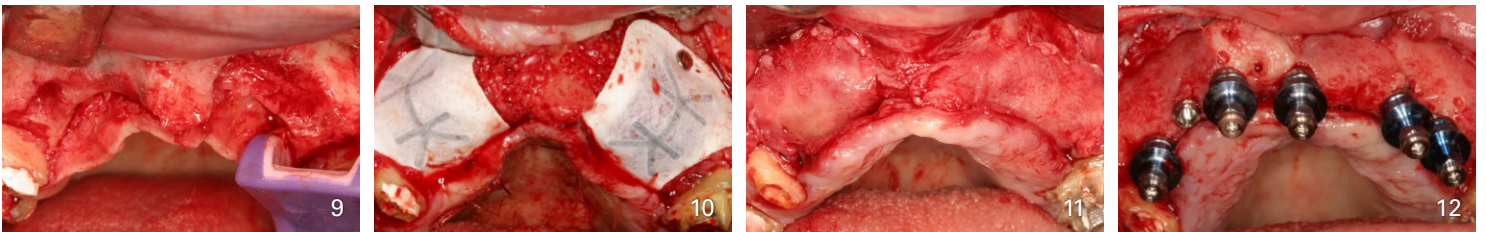


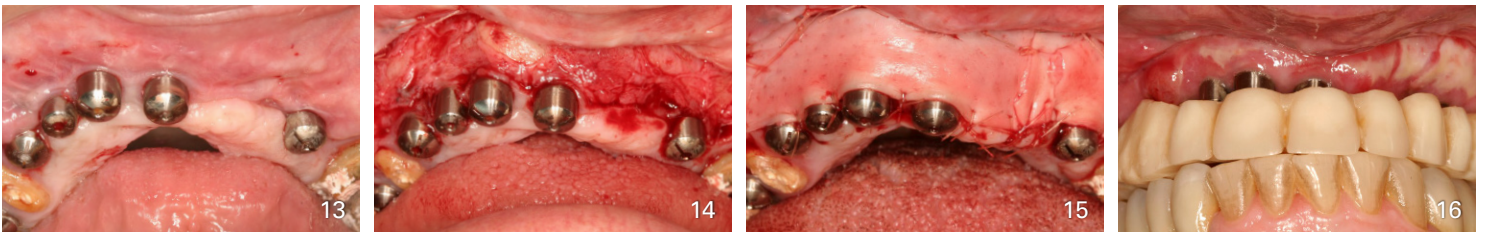
**Fig. 1-3.** A 65 yo female presented with a RPD retained by 5 failing implants. **Fig. 4.** Radiographs reveal bone loss to the apices of the implants in close proximity to the nasal sinus.



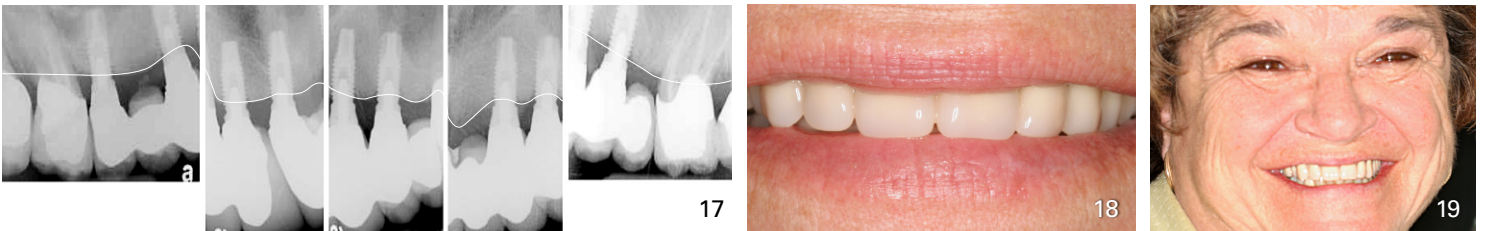
**Fig 5-7.** Five implants were removed and grafted with FDBG. The soft tissue was allowed to heal for 2 months, in preparation for ridge augmentation. **Fig 8.** To eliminate the RPD, and decrease pressure on the future grafted ridge, a fixed prosthesis was fabricated from teeth 3 – 14.



**Fig. 9-10.** Two months later ridge augmentation and bone grafting were performed with bone allograft, rh-PRGF and titanium reinforced Gore-Tex membranes, stabilized with titanium tacks. **Fig. 11.** Eight months following ridge augmentation the GoreTex membranes were removed. 10 mm of vertical ridge augmentation was achieved (compare to Figure 9). **Fig. 12.** In 2005, external hex implants were placed.



**Fig. 13.** Implants were uncovered 4 months later and temp healing abutments were placed. There is an inadequate amount of vestibular depth and a lack of keratinized gingiva. **Fig 14 – 15.** A vestibular extension procedure was performed and a soft tissue allograft was sutured to place. **Fig. 16.** Soft tissue healing 3 weeks following gingival grafting. Note the increase in vestibular depth and the immature healing keratinized tissue. The provisional has been shortened to accommodate the vertical bone growth (compare to **Figure 8**, prior to ridge augmentation).



**Fig. 17.** Final restoration 10 years following bone augmentation. Over 10 mm of vertical bone augmentation has been achieved (compare to Fig 4). **Fig. 18 -19.** Smile and facial view of completed restoration and the happy patient.

