

Implant Reconstruction of Fibular Free Flap Following MRONJ Related Mandibular Resection

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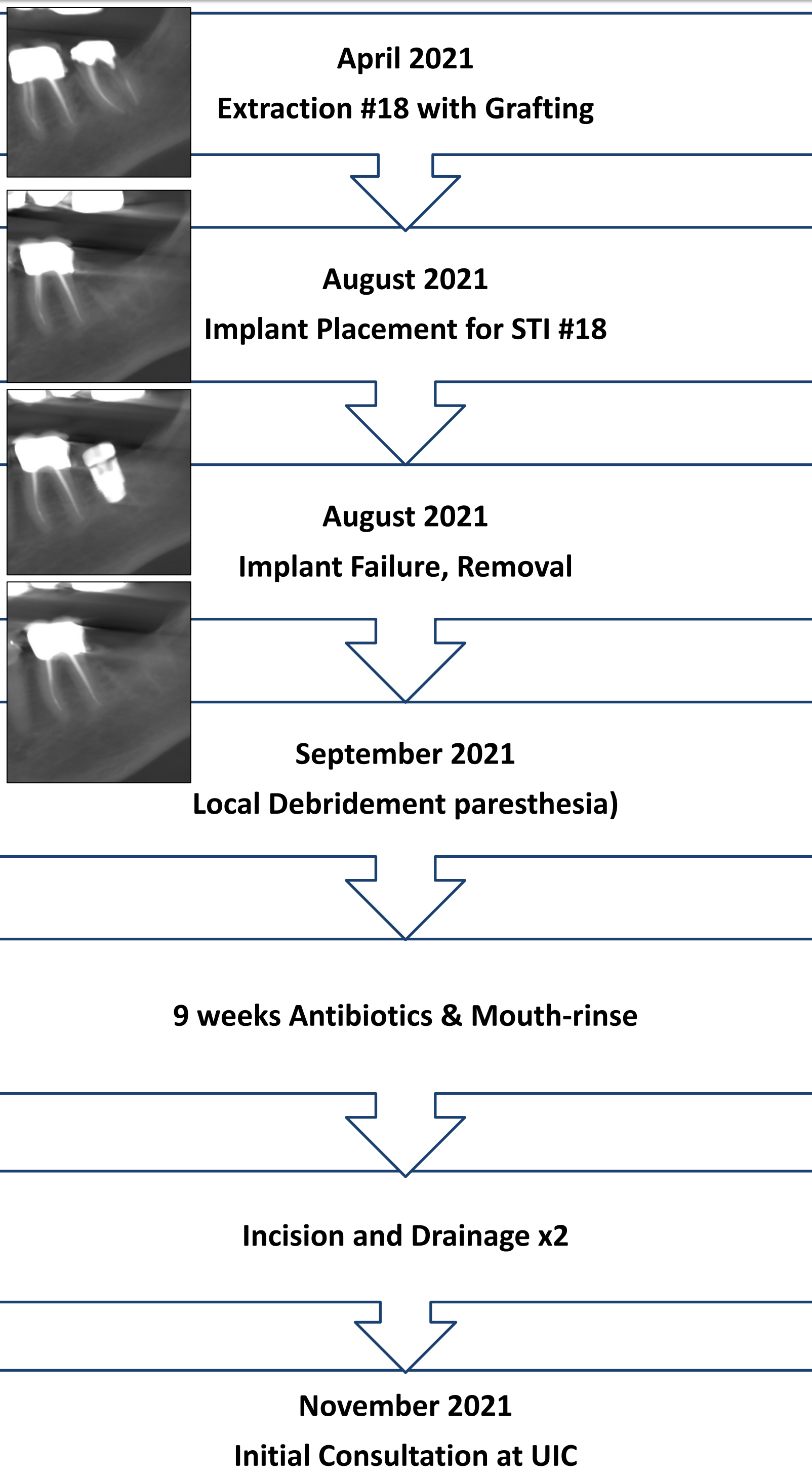
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Introduction

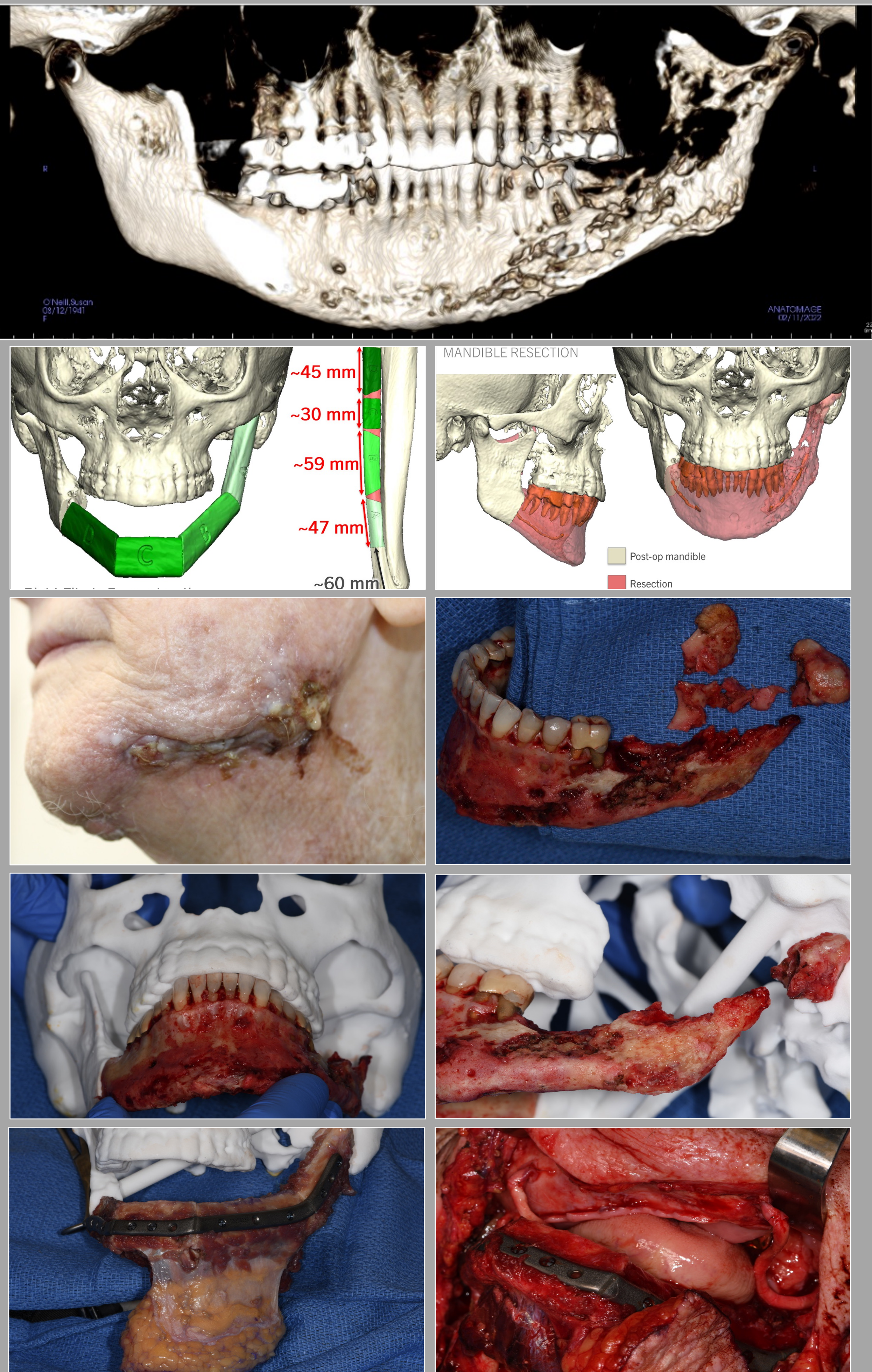
This clinical report of management of a pathologic mandibular fracture due to medication related osteonecrosis of the jaw (MRONJ) following a single unit implant placement. A fibula free flap mandibular reconstruction was completed, implant placement and full arch restoration to restore esthetics and function.

Initial Presentation Outside UIC

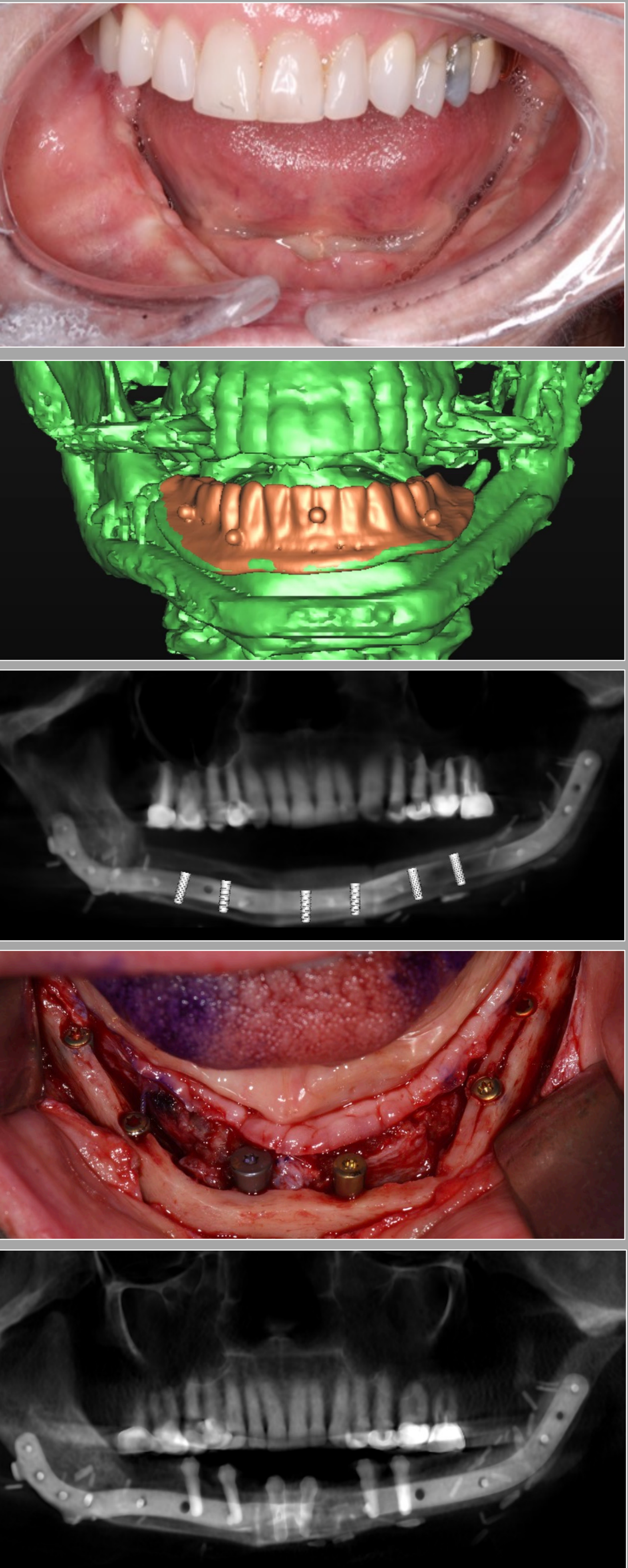


Presentation and Treatment at UIC

Initial Presentation at UIC & Resection



Fibula Implant Placement



Restoration of Prosthesis



Methods & Materials

- 80-year-old female patient presents with advancing MRONJ of the mandible extending from left condyle to contra-lateral ramus
- A subtotal mandibulectomy, fistulectomy, fibula free flap, and bilateral IAN nerve graft was completed
- Following 8 months, a dual scan CBCT taken for restoratively driven implant planning and placement
- After 6 months, the implants were uncovered and conversion of a conventional mandibular resection prosthesis to implant supported was completed
- Clinical evaluation of extra-oral tissues revealed effected neural-muscular system of patient's left lip
- Facial contours of the conversion prosthesis were altered to provide lip support and improve symmetry with a lip bumper
- Trial wax-tooth set up for ideal occlusion and lip support was completed and a PMMA prototype was fabricated
- Final zirconia prosthesis was fabricated and delivered

Conclusion

Implant placement and restoration is a viable treatment option to replace intra-oral hard and soft tissues following mandibular resection with fibula free flap reconstruction. This treatment restores function and esthetics following loss of extensive facial structures.