

TREATMENT OF PERIORBITAL FRACTURES AS AN IMPORTANT COMPONENT OF PLASTIC SURGEONS TRAINING

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Introduction

Midface fractures involving the orbit are the third most common type of facial fracture and usually occur with blunt force trauma. The fractures can cause both functional and aesthetic defects. Their treatment require extensive knowledge and skills across various disciplines. The role of plastic surgeons in the treatment of orbital fractures is different between European countries.

Our aim is to highlight the role of plastic surgery in the treatment of periorbital fractures as a tool to gain anatomical knowledge and skills for different treatments in the anatomical region of the eyes and around. We therefore analysed the number of midface fractures at the Cantonal Hospital Winterthur (KSW) and the inclusion of residents in fracture treatment of the last ten years.

Benefits

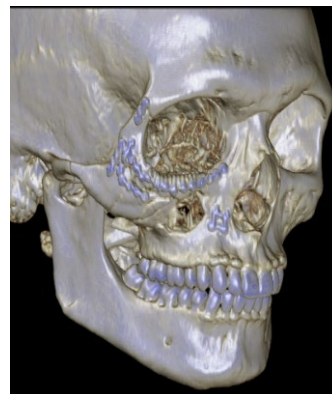
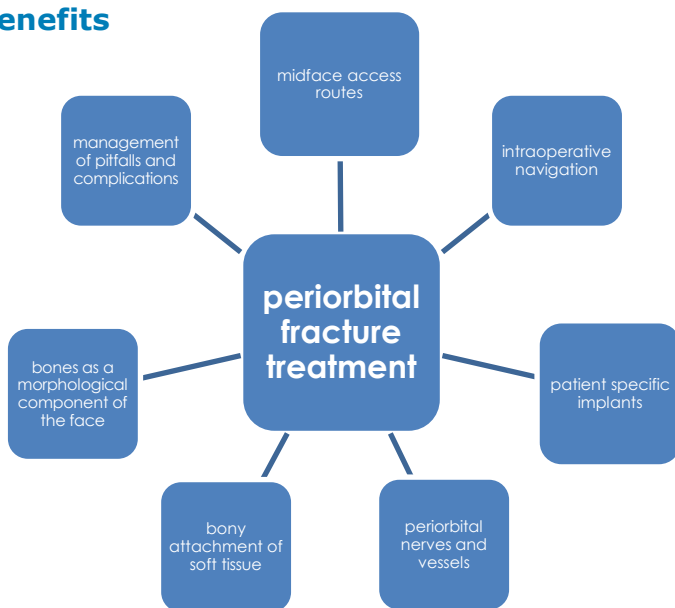


Figure A: above: Complex tripod fracture after blunt force trauma, left: same patient after osteosynthesis

Facts

- 147 cases in ten years (2014-2023)
- 12% operated by a residents under instruction
- 76% substeps operated by a resident



Figure B: Subciliary approach



Figure C: Ectropion after a subciliary approach

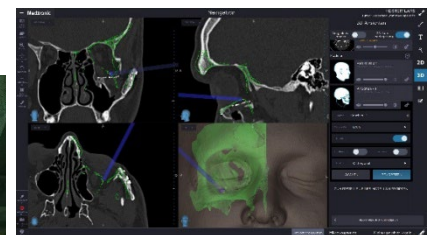
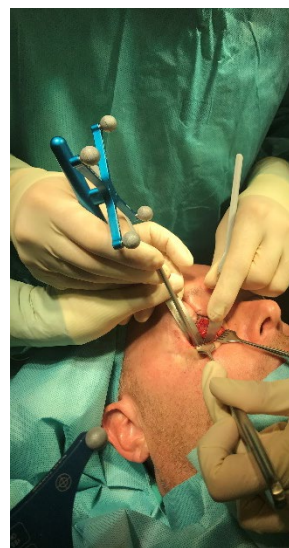


Figure D: Intraoperative navigation

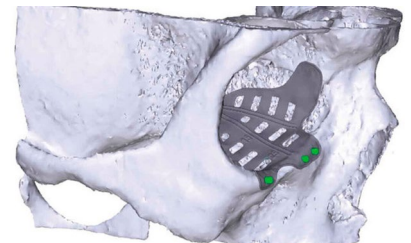


Figure E: Patient specific implant (PSI)

Conclusion

The management of periorbital fractures is a critical part of plastic surgery training as it encompasses a wide range of skills and knowledge applicable to many other interventions in the area around the eyes. Using case studies, we demonstrate the indications for surgery, the surgical treatment, and particularly the standard approaches to the orbit.

- **Aesthetic surgery**
e.g. facelift, cheek contouring
- **Reconstructive surgery**
e.g. tumor removals, injuries
- **Functional surgery**
e.g. ectropion correction