



BEYOND EXPLANTATION: A PROSTHODONTIC STRATEGY TO PRESERVE A FRACTURED IMPLANT



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Background / Introduction:

- Implant fractures are rare (0.2%–1.0%) but highly challenging complications.
- Traditional management involves explantation, which is invasive and costly.
- This case challenges that approach by demonstrating prosthetically driven salvage.

Case presentation

- 60-year-old male with repeated abutment screw loosening at site #31.
- Radiographs confirmed fracture at the implant–abutment interface (Zimmer TSV), (Fig.1)
- Patient declined surgical removal, requesting conservative treatment.

Management approach:

- Coronal fractured portion carefully removed under magnification.
- Fixture preserved **in situ**.
- Original crown (fig 3) modified: abutment diameter reduced, bevel removed (fig.4)
- Crown seated directly on flat platform → bypassed compromised connection (fig.2)

Why this works:

- **Phantom space (microgap):** microscopic gap at internal hex and bevel base.
- Fracture compromised lead-in bevel ring, destabilizing the connection.
- Modification allowed crown to seat intimately on flat platform.
- Increased stability and resistance to micromovement → preserved implant.

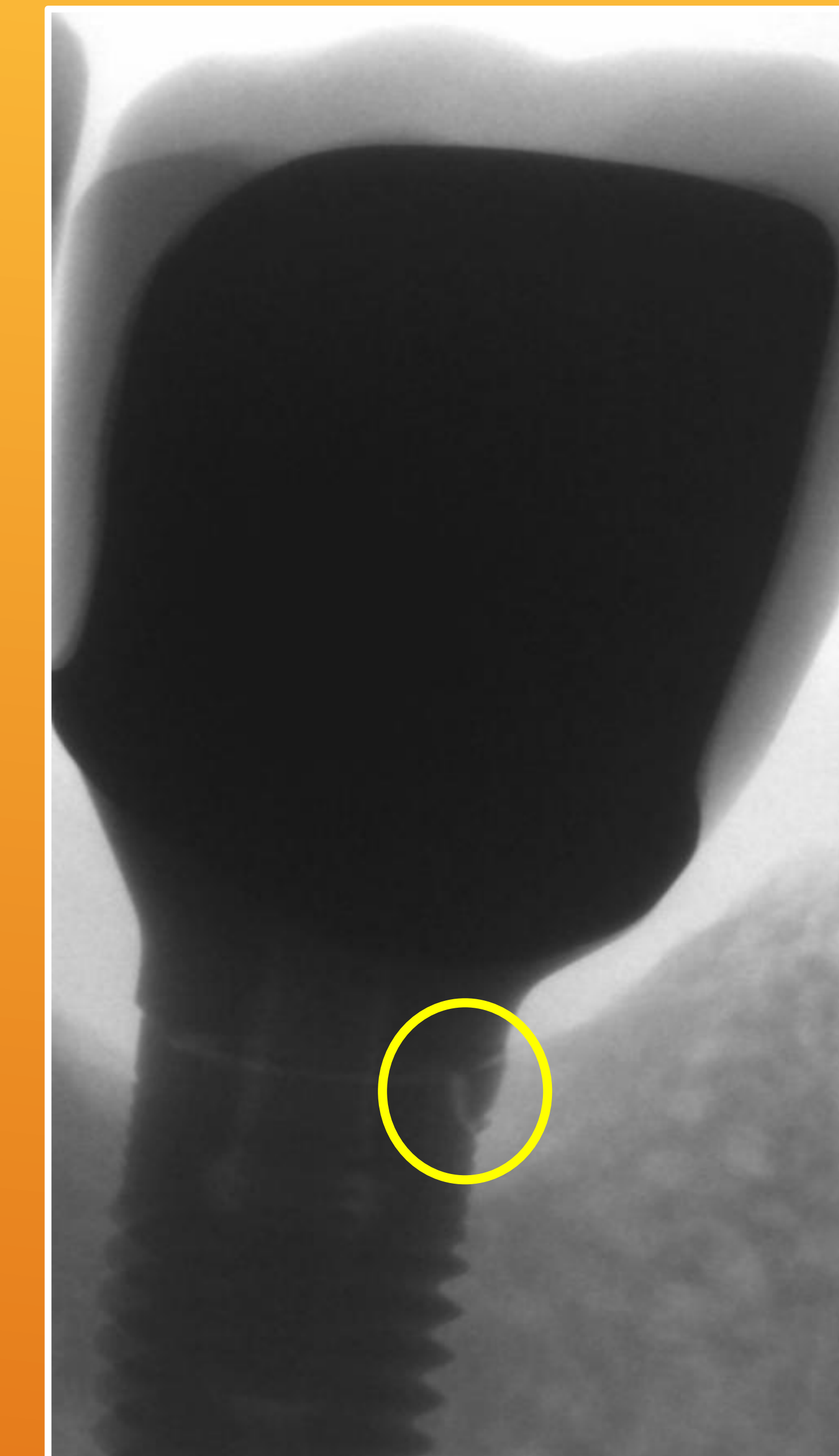


Fig.1

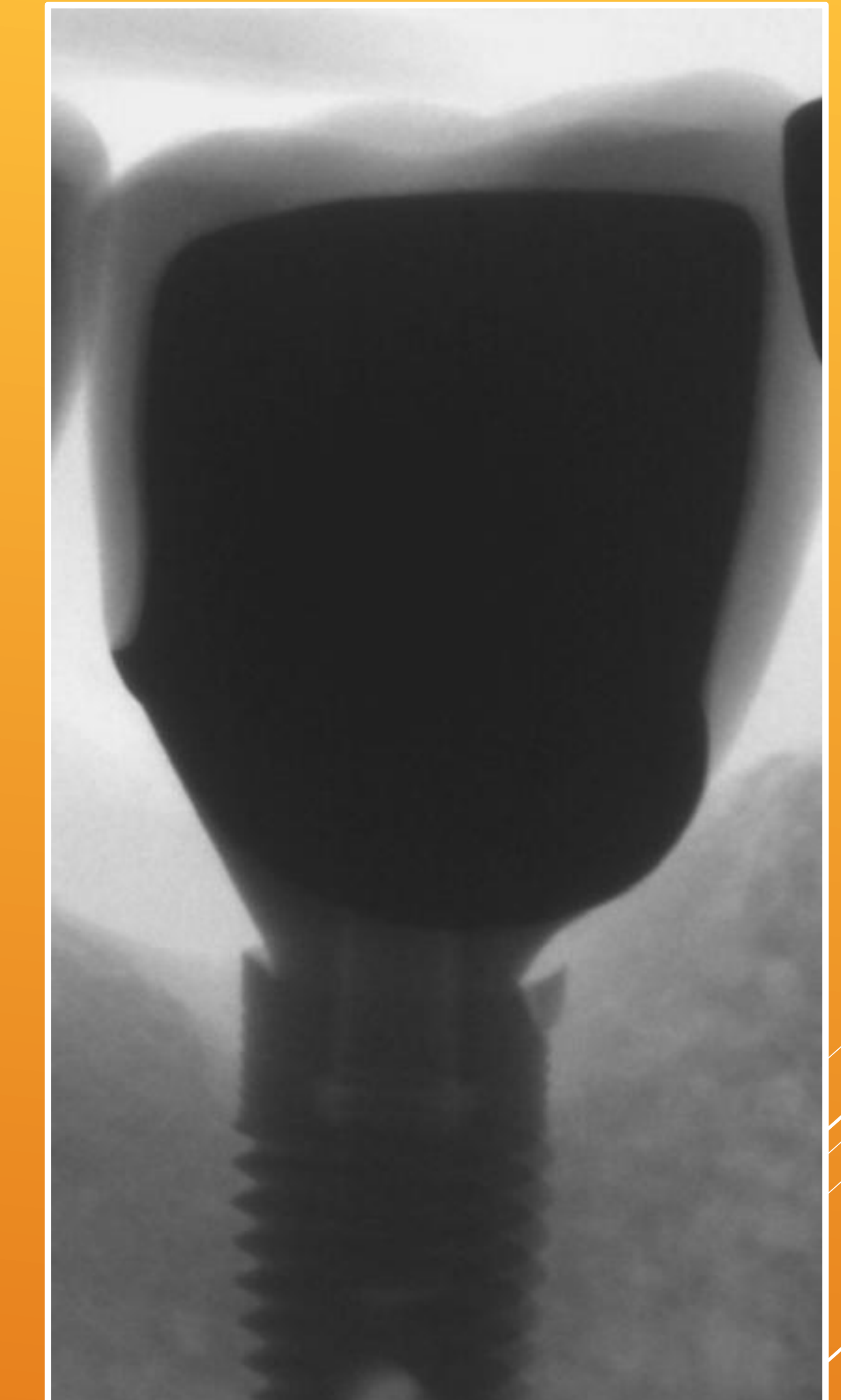


Fig.2

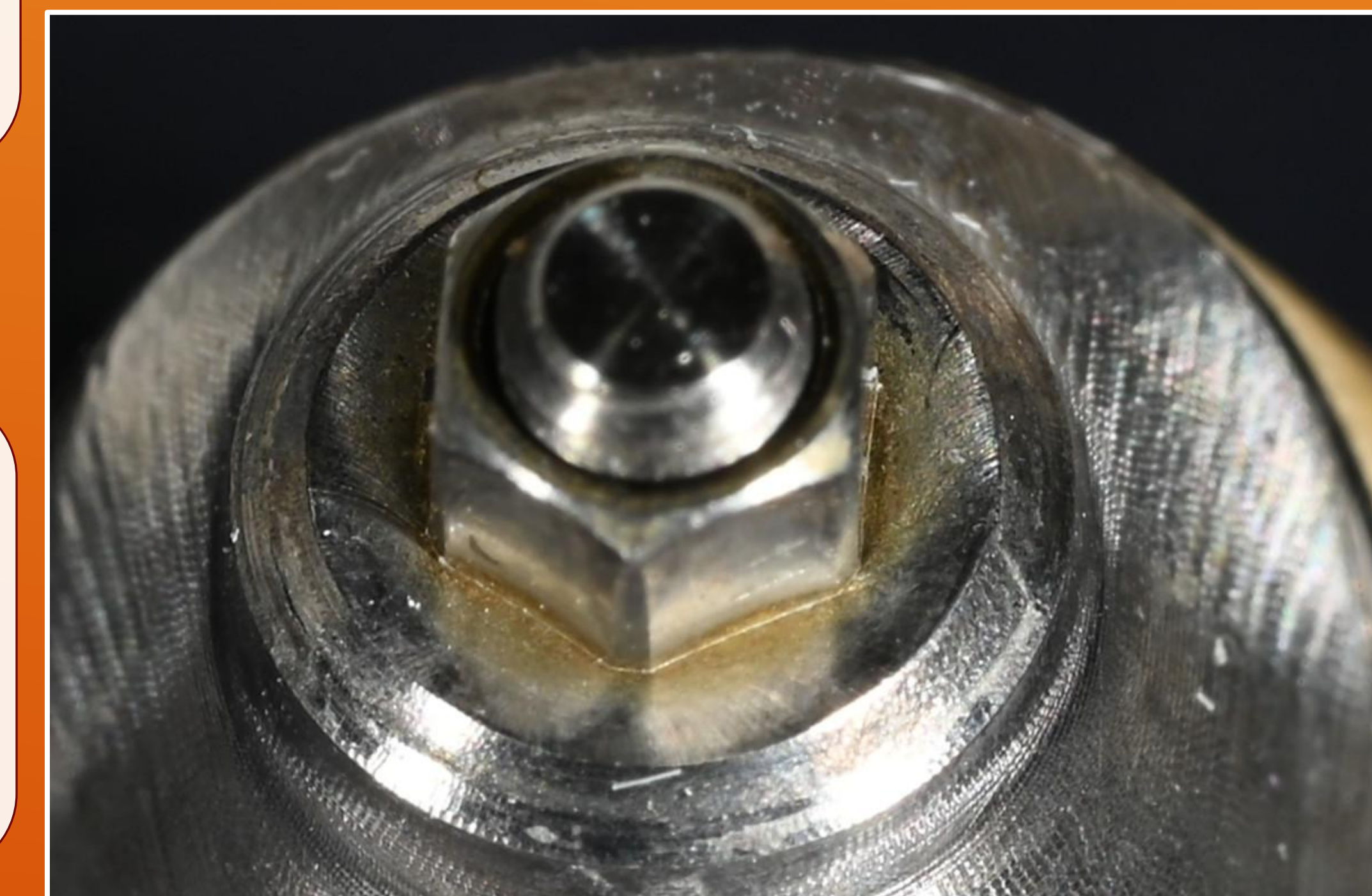


Fig.3



Fig.4