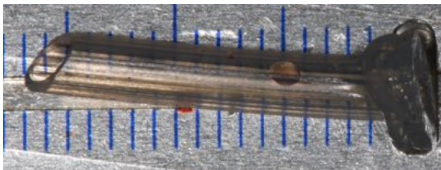


SURGICAL DECOMPRESSION: NOT JUST A PRELUDE TO ENDODONTIC MICROSURGERY

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AIM

- To report the use and evolution of novel 3D printed surgical decompression devices to induce healing of large periapical lesions.



Different devices used for decompression

METHOD

- Patient (21 years old, male) previously sustained a lateral luxation injury in 2019
- UR1 root canal treatment was completed in specialist private practice
- Referred one-year post-treatment due to development of a large apical lesion and CBCT indicated possible radicular cyst
- A soft acrylic device was digitally designed and 3D printed with circumferential perforations for suturing
- Following placement, the patient was given an irrigation protocol and aftercare advice

PRE-OP RADIOGRAPH



IDEAL PROPERTIES OF A DEVICE

Biocompatible
Does not favour clot formation
Cost-effective
Moderate stiffness
Facilitates passage of sutures
Large lumen
Radiopaque
Sterilisable