

Custom Solutions in Endodontics with 3D Printing

Three-dimensional (3D) printing technologies are advanced manufacturing technologies based on computer-aided design digital models to create personalized 3D objects.

SURGICAL

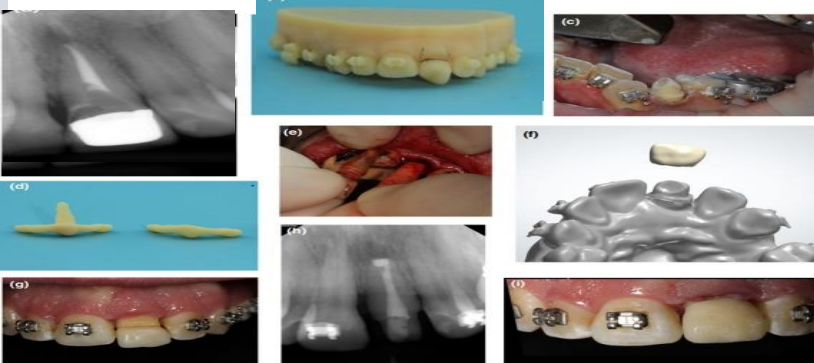
APPLICATIONS OF 3D PRINTING

NON SURGICAL

OSTEOTOMY MICROSURGICAL GUIDES



VIRTUAL SIMULATION OF AUTOTRANSPLANTATION



EDUCATIONAL MODELS

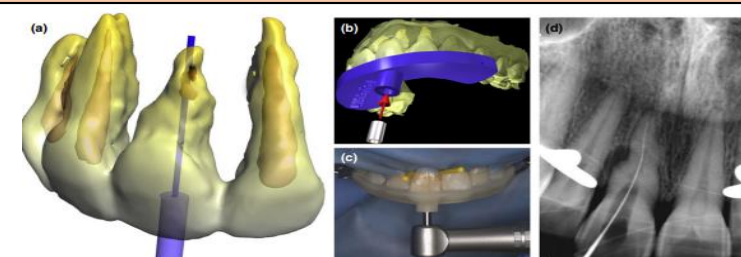
MODEL OF PERIAPICAL LESION CLOSE TO CANAL



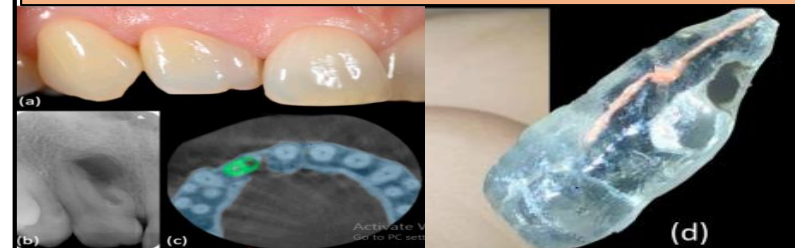
MODEL OF REGENERATIVE ENDONTOICS



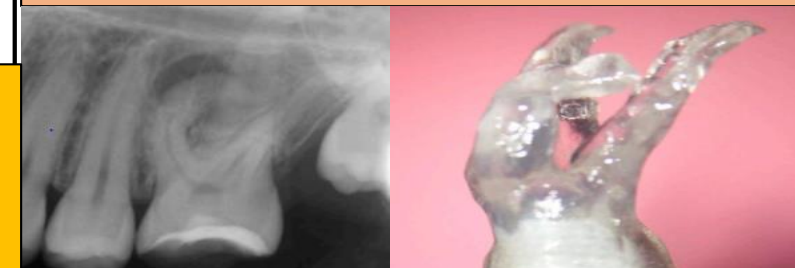
3D PRINTED GUIDE FOR ENDODONTIC ACCESS



TRANSPARENT MODEL OF DENS INVAGINATUS



3D MODEL OF DILACERATION



CONCLUSION 3D printed models and guides may help operators to plan and tackle complicated non-surgical and surgical endodontic treatment, and aid in skill acquisition

REFERENCES Anderson J, Wealleans J, Ray J. Endodontic applications of 3D printing. Int Endod J. 2018 Sep;51(9):1005-1018. doi: 10.1111/iej.12917. Epub 2018 Mar 23, Tonini et al. 2021. "Print and Try Technique: 3D-Printing of Teeth with Complex Anatomy a Novel Endodontic Approach" Applied Sciences 11, no. 4: 1511. 10.3390/app 11041511.