





PGE 387

Guided Endodontics

Guided Endodontics refers to an advanced, precision-driven approach to performing root canal treatments using 3D imaging, navigation systems, and customized surgical guides.

Wicher J. van der Meer described a new method to locate an obliterated root canal in 2015 and M. S. Zehnder was first to use the term Guided Endodontics in 2016.

Types of Guided Endodontics a)Static Guided Endodontics b) Dynamic Guided Endodontics



Wicher J. van der Meer

Software used in Guided Endodontics

d)Dentsply Sirona Galileos a)CODiagnostiX

b)2Ingis Technology system e)Blue Sky Bio

c)Acetone Imaging software(AIS) f)EndoTouch by Vatech

Components of Guided Endodontics

- a)CBCT.
- b)Intraoral Scanning device.
- c)Digital imaging software.
- d)Burs and Rotary instruments.
- e)Endodontic navigation systems.

a)CBCT and surface scan of involved tooth.

e)Sleeve selection.

STATIC NAVIGATION

virtual drill path.

b)Merging the **CBCT** scan and surface scan with software.

c)Designing of Endodontic guide and tracing the canal.

a)CBCT Scan of entire arch and

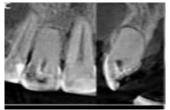
e)During drilling,follow the planned path and complete the treatment.

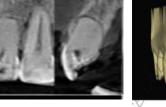
b) planning virtual drill path.

DYNAMIC NAVIGATION

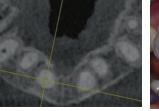
d)Calibrate handpiece and bur with calibrator.

c)Tracing



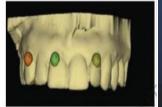


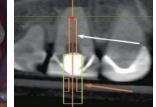
d)Creating a

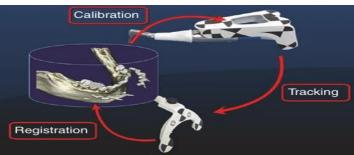












CONCLUSION

Guided endodontics enhances precision, safety, and treatment outcomes by using advanced imaging and technologies. It improves efficiency, reduces errors, and useful in complex cases.