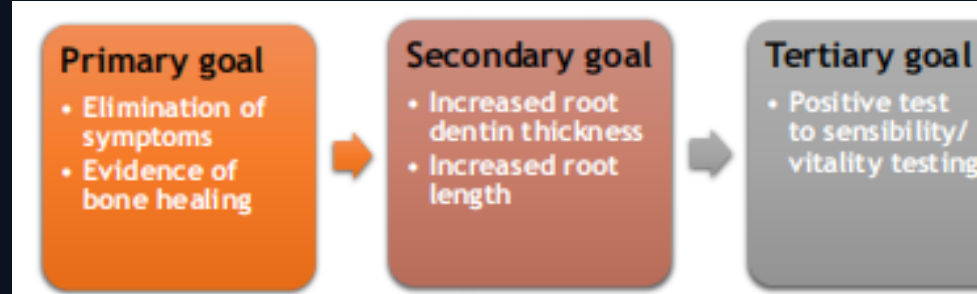


REPs REVAMPED : EXPLORING THE FRONTIERS OF REGENERATIVE ENDODONTIC PROCEDURES

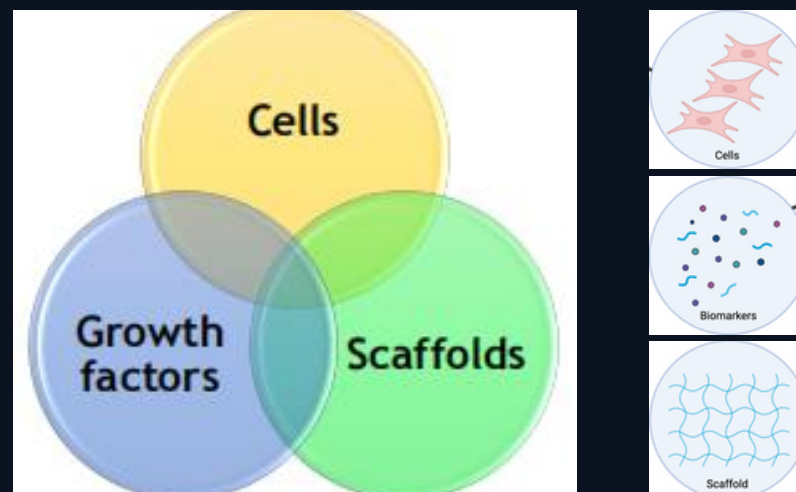
DEFINITION

Regenerative endodontics can be defined as biologically based procedures designed to replace damaged structures including dentin and root structures as well as cells of the pulp dentin complex

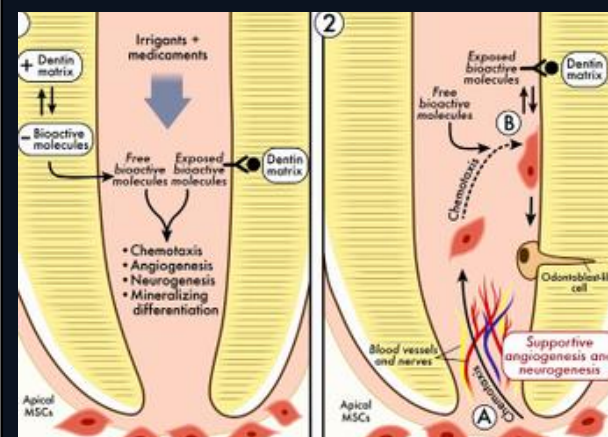
SUCCESS OF REPs



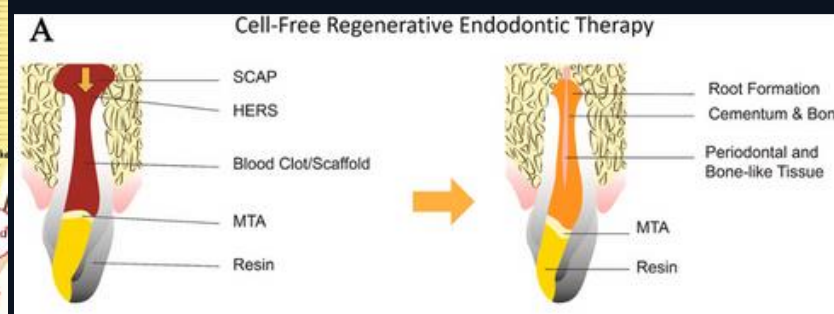
TRIAD OF TISSUE ENGINEERING



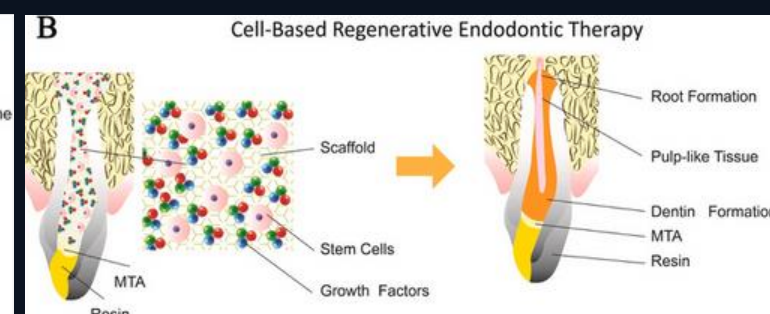
BIOLOGICAL CUE



CELL FREE APPROACH



CELL BASED APPROACH



ADVANTAGES

- Preserving tooth vitality
- Root maturation
- Tissue growth
- Promoting normal functions

CHALLENGES IN REPs

- Disinfection
- Dental Pulp Stem Cell Differentiation
- To obtain autogenous stem cells
- Limited spatial control

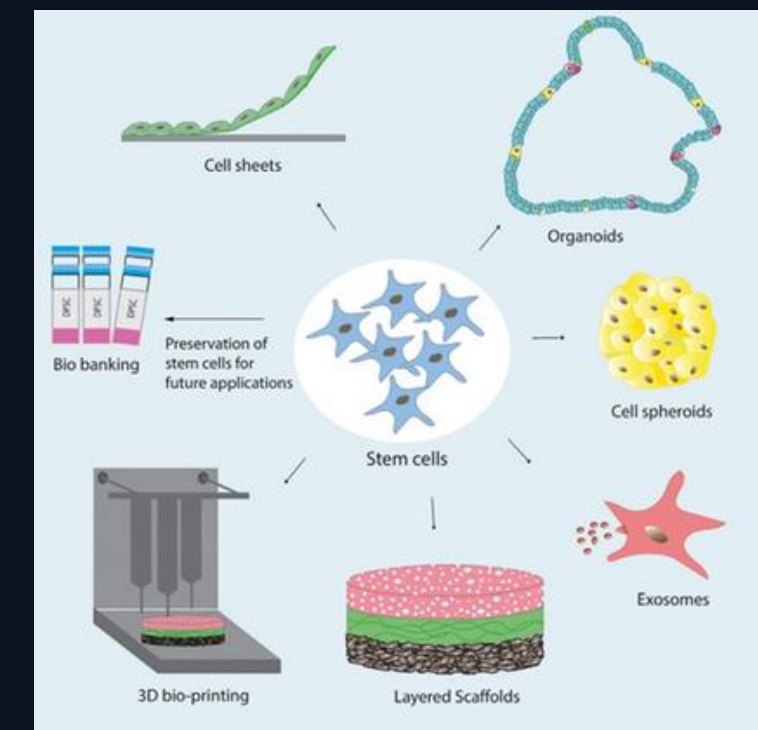
DISADVANTAGES

- Tooth discoloration
- Intracanal calcification
- Crown root fracture
- Undesired tissues formation

FUTURE SCOPE

- Liquid Hydrogel to Rigid Scaffold
- Photopolymerisable Hydrogel
- Electrospun Nanofibers

CURRENT TRENDS



REFERENCE :

Almoharib, Bander Khalid, et al. "Innovative Approaches in Regenerative Endodontics: A Review of Current Literature." International journal of health sciences 6.S10: 1684-1700.

Thalakiriyawa DS, Dissanayaka WL. Advances in regenerative dentistry approaches: An update. International dental journal. 2024 Feb 1;74(1):25-34.