

Name:- M-Faizon

ID:- I3636

Subject:- Operative Dentistry.

QNO:-
7

(A) write possible outcome for missed root canal.

(B) A patient come for root canal treatment of maxillary 2nd molar during procedure breakage of file occur in the canal, Manage the whole procedure?

Ans:-
7

(A) ^① ⇒ untreated or missed root canal.

• This is one of the most common reason for a failed root canal procedure in molars as there are multiple root and pulp chamber and these are the teeth which are most common to have an extra canal or additional canal. According to a study the presence of an additional canal is reported close to 75% of the time in the upper first molar.

② ⇒ Left over pulp tissue:-

This is another major reason for failure of root canal treatment in some instances the root canal is curved or bent at angles which make it difficult to reach some canal are extra long normal root canal range from 15mm to 25mm in length but some canal can reach up to 30mm which make it

quite difficult to reach as these lengths there will be left to infected tissue in the canal which can lead to failure in the root canal in future.

③ ⇒ Coronal leakage:-

This results from leaking crown or restoration when the crown or the post RCT restoration is not properly done because re-infecting the root canal ~~treatment~~ system.

This leads to failure of the root canal treatment done thus requiring a re-RCT along with a new restoration or crown as well.

④ ⇒ Over extension of GP point into periapical region.

This can be termed as an iatrogenic cause for failure of RCT where the dentist's question is at fault.

This happens when the GP point is over extended or crosses the tooth apex and enters the periapical region thus inflaming the surrounding tissue.

Q No: 7

Clinically explain root canal procedure for a Maxillary 1st Premolar?

Ans: 7

⇒ Isolation with Rubber Dam:-

① Isolation of the tooth is accomplished with a rubber dam

→ keeps bacteria in the saliva from entering into the tooth.

→ prevent debris, instruments, etc.

from going down the patient's throat.

② High-tech instruments:-

• Rotary nickel-titanium files

→ Efficient way to clean the canal system, significantly reducing operating times

→ Able to navigate curved canal due to their flexure.

⇒ Cleaning the root canal:

• We use many instrument of different sizes and different shape to properly clean and shape your specific root canal anatomy.

⇒ Disinfection of the root canal.

① Sodium hypochloride is one of the disinfectants used to reduce the bacteria load within the tooth.

② Specialized blunt-ended needles are used to deliver these disinfectants to the end of the root in a safe and effective way.

→ Accessing the Root Canal:-

To gain access to the root canal of the tooth, a ~~the~~ small opening is made either on the occlusal surface of the tooth or on the lingual side.

→ In a multi-rooted tooth, gaining access into the root canals is more challenging.

→ With the aid of a microscope we are able to locate any hidden or calcified canals.

⇒ Final Preparations:-

After thoroughly cleaning and shaping the canal, the canal are dried with absorbing paper point.

⇒ Obturating:-

Finally, the canal are sealed with two components.

- Sealer - a cement that sets over time.

→ Gutta percha - a filler made of a natural form of latex.

• upon completion of the root canal treatment, a temporary filling is placed over the sealed canal that has two parts:

→ Cotton pellet soaked in an antibacterial solution.

A solid temporary filling on top.

- A final restoration is placed by your dentist.

→ This will restore functionality to your tooth and protect it from fracturing.

Q No 3:-
7

A patient came to your clinic with incomplete root formation of mandibular 1st molar.

Ans:-
7

⇒ Using MTA:-

- 1- The canal has been opened, rinsed with 5% sodium hypochlorite, dried, and calcium hydroxide was then placed in the canal for 1 week.
- 7 days after initial treatment with calcium hydroxide, the incisor was instrumented to remove calcium hydroxide and all the remaining tissue before further treatment.
- The apical 4 to 5 mm of the incisor root has been filled with mineral trioxide aggregate (MTA).
- A moist cotton wool pledget was then placed in the canal overnight and the system temporarily sealed using thermoplasticized gutta-percha using obturation, and a zinc oxide eugenol dressing.
- Check radiograph was obtained to evaluate the apical seal.
- The gutta-percha and cotton wool pledget was removed the following day and a definitive root-filling placed coronal to the ~~definitive~~ MTA using thermoplasticized gutta-percha.

- The incisor has completed initial treatment with MTA. A temporary restoring has been placed to seal the canal opening.
- At the 6-month and 1-year follow-ups, the clinical and radiographic appearance of the teeth showed resolution of the periapical lesions.

Q No: 4 Differentiate all types of pontic thoroughly?

Ans: ① Tylman - pontic is the suspended member of a fixed partial denture. It replaces the lost natural tooth restores function, and occupies the spaces of the missing tooth.

② → Smooth surfaced and convex in all directions.

→ Easily cleansable

→ pinpoint pressure free contact on the ridge.

→ No irritation to the gingival tissue.

→ Restore function.

→ No abutment overloading.

→ Color stable.

⇒ Function of pontics:-

→ Mastication

→ Speech

→ Esthetics.

⇒ Mucosal contact:-

① ridge lap

② modified ridge lap

③ conical

⇒ No mucosal contact:-

① sanitary

② modified sanitary

① ⇒ Ridge lap Pontic.

This pontic resembles a nature tooth. It is designed to adapt closely to the ridge. It avoided because it is difficult to maintain and often leads to inflammation of the tissue in contact.

② ⇒ Modified ridge lap Pontic.

The modified ridge lap Pontic combines the best features of the hygienic and saddle pontic design, combining esthetics with easy cleaning.

③ ⇒ Ovate Pontic.

This Pontics are used in cases where the residual ridge is defective or incompletely healed.

④ ⇒ Conical Pontic.

① It is recommended for mandibular posterior teeth where esthetics is of lesser concern.

⑤ ⇒ Modified Sanitary

It presents a free flowing archway in the region adjacent to residual ridge.

Q Nos. 7

Classify dental bridges and explain its types briefly?

Ans: 7

Materials for construction of Bridge work.

- ① Metal
- ② Metal - Ceramic
- ③ All - Ceramic
- ④ Acrylic

⇒ Types:-

① Fixed Bridge

Attaches rigid connectors at both ends of pontics which forms a rigid prosthesis.

⇒ Advantage:-

- ① provides cross arch splinting
- ② Ease of handling.

⇒ Disadvantage:-

- ① possible bending bridge.
- ② Mobility of abutments may result in open.

② ⇒ Fixed Movable:-

it has a rigid connector usually at the distal end of the pontic and a movable connector that allows some vertical movement of the mesial abutment tooth.

⇒ Advantage:-

- ① Allow flexure of mandibular.
- ② Allow units to be cemented as individual sections.

→ Disadvantages:-

- ① More space required
- ② Metal may show occlusally
- ③ Food impaction.

③ ⇒ Cantilever Bridge.

It's a kind of minimal preparation bridge. It provides support for the pontic at one end only. The pontic may be attached to a single retainer or two or more retainers.

splinted together.

e.g. - Maryland bridge.

⇒ Advantages:-

- ① Preserve tooth structure
- ② Minimal pulp trauma
- ③ Rebond possible

⇒ Disadvantages:-

length of span is limited to one pontic only.

② Not successful for posterior prosthesis.

④ ⇒ Spring Cantilever bridge:-

They are restricted to the replacement of upper incisor teeth. Only one pontic could be supported by spring cantilever bridge.

⇒ Advantage: → Restoration of spaced dentition

⇒ Disadvantage: → Food impaction under metal connector. ② Dislodgment of retainer.