

2.5.4 – The Institution provides opportunities to students for midcourse improvement of performance through specific interventions

05/03/23
1)

CONSERVATIVE TEST
FIRST INTERNAL TEST TEST
PHOENIX ABSCESS Akshaya M

- Acute exacerbation of chronic ^{periapical} abscess is known as phoenix abscess
- The patient is asymptomatic for a period of time and then suddenly experiences a pain and swelling and thus it is the exacerbation of a preexisting abscess.

→ Clinical features

↳ similar to periapical abscess, but the patient has already had episodes of acute abscess.

↳ Tender on percussion positive

↳ severe pain

↳ Acute nature.

↳ Vitality test negative.

↳ In some cases, sinus tract formation.

Mostly, the diagnosis is depicted from the patients own history.

Treatment

↳ Mostly, if any extraoral swelling present

antibiotics given for the swelling to subside

↓
Access opening done

↓
Checked if cavity drains by the access cavity

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if there is any extraoral swelling

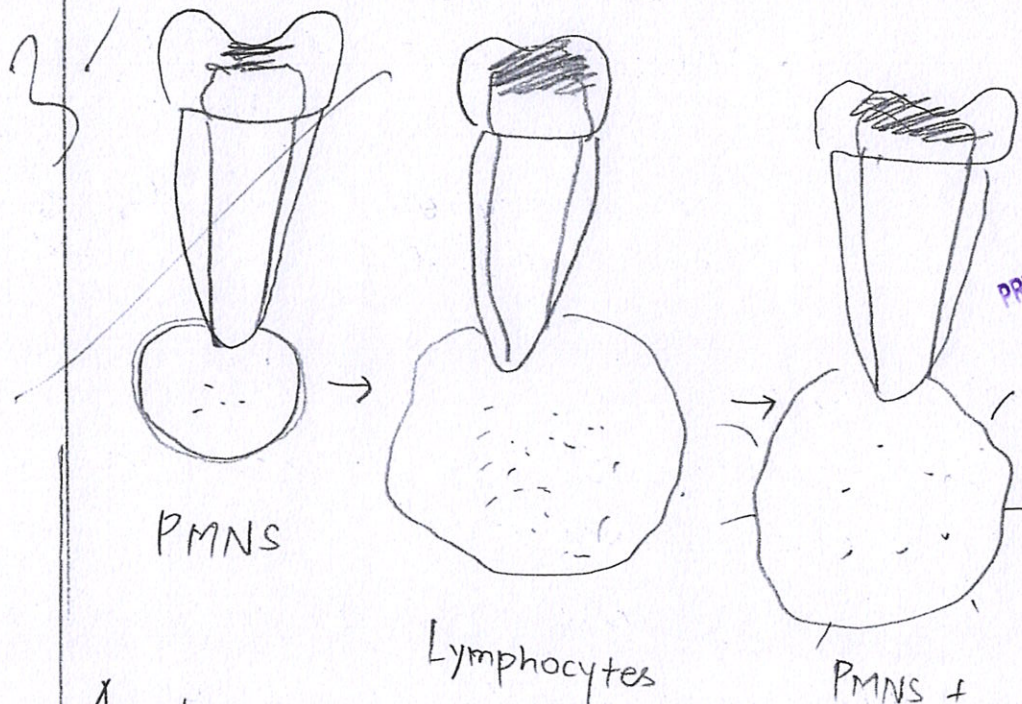
↓
Incision & drainage @ the most fluctuant point

↓
open wound healing for a day

Radiographic features

↳ similar to periapical abscess

Ill defined radiolucency around the apex of the tooth.



Acute periapical Abscess

→ Chronic

→ Exacerbate

Phoenix Abscess

**s.u.p.t.m*
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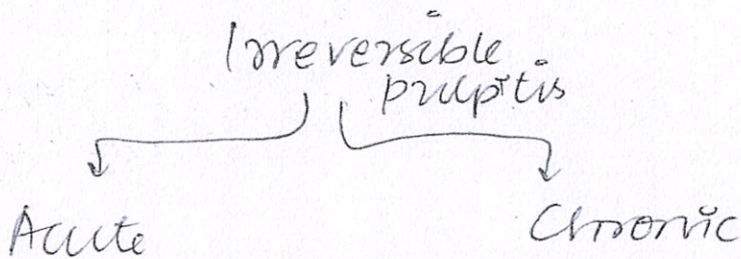
2) Irreversible pulpitis

→ It is a condition that has affected pulp but the pulp cannot recover from the damage therefore leading to pulpal extirpation?

→ It is usually a sequelae of Irreversible pulpitis.

etiology

- ↳ Caries
- ↳ trauma
- ↳ barometric changes
- ↳ crack in the tooth.



Clinical features

↳ Sharp, continuous throbbing pain

↳ pain persist even after the removal of stimulus

↳ NOCTURNAL pain

↳ pain radiating to head, jaw

↳ Irritability, fatigue.

↳ presence of a deep carious lesion, or any root caries

Wulff's group.

No changes are evident in the periapex

but if caries present, loss of enamel, dentin are even approximation to pulp may be seen.

If chronic irreversible pulpitis, pulp exposure is seen.

Treatment

→ Remove the etiology

If any caries is present, remove it and if it has not reached pulp, try calcium hydroxide and observe for 2 weeks. If pain still persists, do ROOT CANAL TREATMENT.

3) → INGLES WORKING LENGTH determination

→ working length is defined as the

"distance between the coronal portion and ^{where} the root preparation and obturation ends."

→ The most commonly used method is Ingles method.

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aria they are used for "triso"
working length determination. Canal.

- ↳ pre curved files help in the curvature of the root and allows the file to go in smoothly.
- ↳ The file is curved with gauge sponge?
- ↳ silicon stopper is an important tool in maintaining the same working length throughout the procedure.
- ↳ It can also be sterilized with the silicon stopper.

METHOD

pre operative Xray of teeth taken

The length of the tooth from stable occlusal point to the radiographic apex is determined

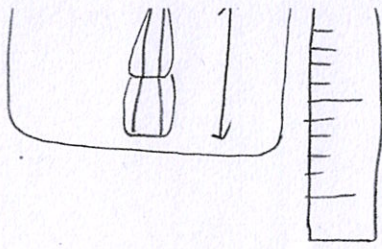
for ex: 15 mm

Safety allowance?
Safety factor?

1 mm is subtracted from the previously calculated value

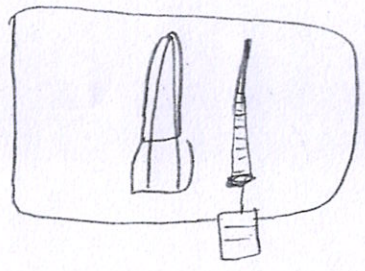
ex: $15 - 1 \text{ mm} = 14 \text{ mm}$

due to → Radiographic errors
to the → Apical foramen is front to the radiographic apex.

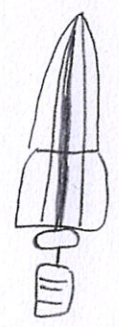


diagnostic xray
the working length
from the radiographic
apex to stable occlusal
point

Subtract 1mm
from the determined
length



Mark the length
on the diagnostic
instrument (File)



Insert the file into
the tooth &
send for xray

~~Non~~ correct: File 0.5 to 1mm
away from the
apex

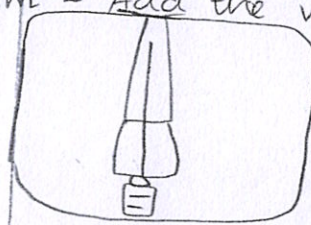
SEND FOR
X RAY



Working length
achieved

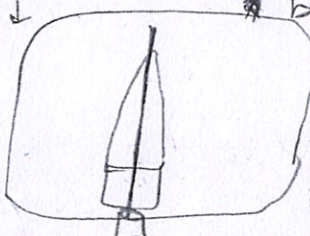
~~Handwritten scribble~~

Measured value > than
1mm - Add the value



to the
previously
taken
measurement
& put in tooth
Send for
xray

Measured value
& beyond
apex



SUBTRACT
the excess
value

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4) Pulp vitality w...

↳ cold test

↳ heat test - GIP stick

↳ spectrophotometry

↳ cavity prep

↳ Percussion test

↳ electric method.

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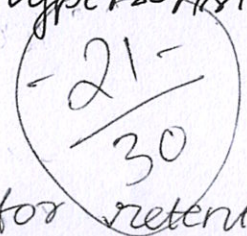
18/04/23

CONSERVATIVE TEST IMPROVEMENT TEST

AKshayaam
IN yr

- 1) Classify pins. Pin retained Amalgam restorations
- 2) Working bleach
- 3) Treatment plan for hypersensitivity

1) Pins



pins are used for retention and resistance for amalgam restoration which does not have adequate retention.

types

- ↳ Cemented pins
- ↳ Friction lock pins
- ↳ Self threaded pins

Threading mate system

- Regular 0.78
- Minim 0.61
- minikin 0.58
- minuta 0.48

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Size types

- Two in one
- Link series
- Self shearing

→ Indications

- Grossly decayed tooth
- Tooth that need to be stabilized for orthodontic and periodontal treatment
- Additional stability

→ Contraindication

- ~~subfrontal~~ anterior tooth where esthetics is essential
- Inadequate space for pin placement.

~~8/11/21~~

Cemented pins

↳ The cemented pins are 0.0020" in diameter and the pinhole > pin diameter

→ The pins are cemented with the help of cements such as

- Zinc phosphate
- Zinc polycarboxylate

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- The pin diameter > pin hole
- The retention of the pin is got by the

RESILIENCY OF THE DENTIN

- It is 3 to 4 times more retentive than cemented pins.
- Self threaded pins
 - These pins are also thicker than the pinhole diameter and

The threading of the pins is used as additional retention.

- It is the Most Retentive

Retention

Self threading > Friction Lock > Cemented pins

Factors involved while placing pins

↳ More the number of pins, lesser the retention

- 1 + pin per missing axial line

→ Pins retention \propto dentin
 $\propto \frac{1}{\text{Amalgam}}$

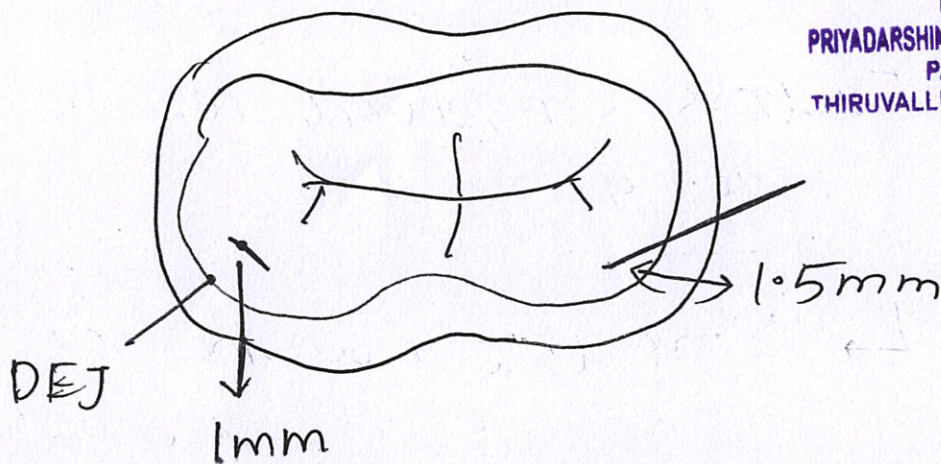
64 $\frac{1}{2}$ → Pins
2.7mm into dentin
should be placed

→ Pins should be placed
at multiple levels

from margins

→ pins should be 1mm
away from Dentino Enamel
Junction and

1.5 mm away from
external surface



~~scriptum~~
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1) Walking bleach

- It is a type of bleaching performed in an RCT treated tooth.
- It is done to ^{= root canal.} remove the debris that has settled after the root canal treatment which can be blood, bacteria, or any resins.

Indications

- Dentin discolouration
- Haemorrhagic discoloration

Contraindications

- Thinner dentin
- hypoplastic
- Pregnancy / nursing

Method

→ Before performing this method, DOCUMENTATION is done ~~after~~ to show to the patient the difference obtained ~~after~~ bleaching.

is ~~cutted~~ 2mm above the clinical crown and it is sealed with a

↓
stable restorative material
preferably GIC

↓
to seal the pulp chamber,
to avoid entry into the
apical portion

↓
fill the cavity
with 10% sodium perborate

↓
close it with a intermediate
restorative material

↓
check for bubbles

if bubble comes - defective
restoration
↓
recheck

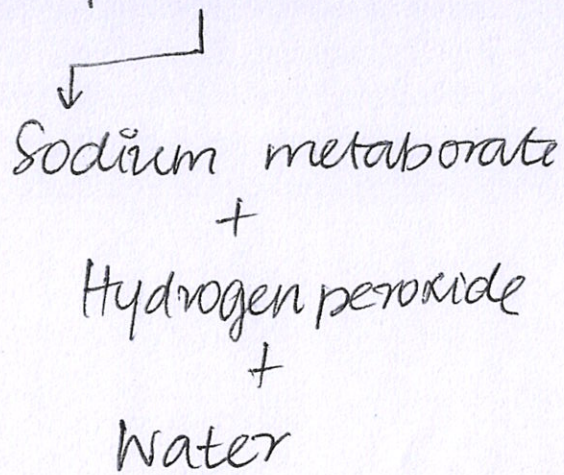
if no
bubble at restoration

send patient

↓
After 2 weeks

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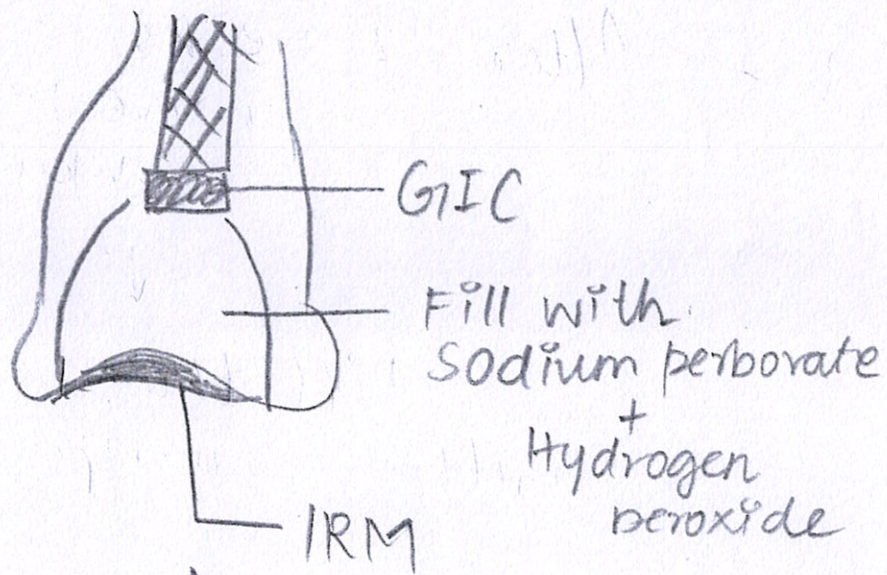
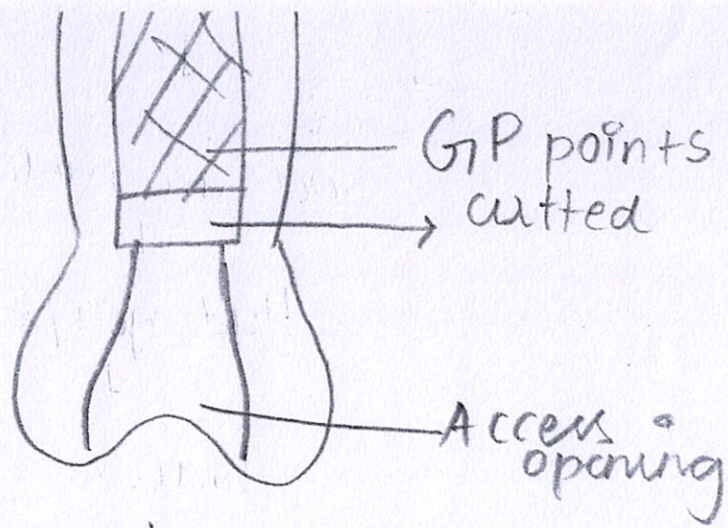
of action
Sodium perborate



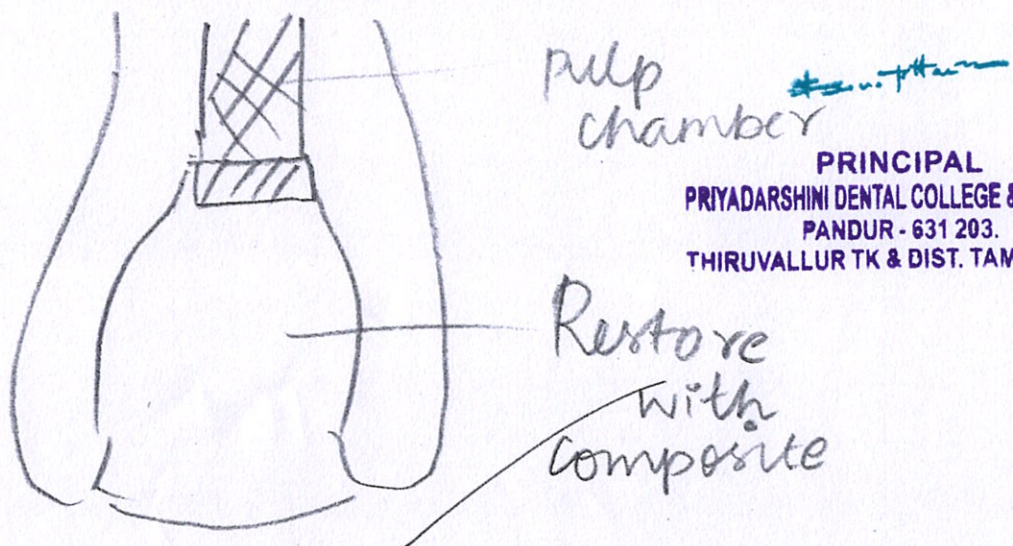
After 2 weeks
Remove bleeding
agent

↓
Fill the cavity
with composite

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2 weeks



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2) Treatment plan for hypersensitivity

Management by

↳ Occluding the dentinal tubules

- by forming a smear layer

• It is formed by rubbing an Orange stick on the dentinal tubules

- By using sealants

• Sodium fluoride

• Sodium phosphate

• Calcium Hydroxide

↳ helps in sealing as well as regeneration

- By using Restorative material

— GIC
Composite

↳ By desensitizing the Neve endings

Potassium nitrate

Tooth paste

Twice a day for 2 week

potassium nitrate acts by
desensitising the nerve endings

↓
thereby Inhibiting
the Impulses to the
brain

Dentinal hypersensitivity

4
↓
Mild

Tooth paste,
Mouthwashes
Containing
pottasium
nitrate

Moderate

→ Sealants
→ Cements
like
Calcium hydroxide

Severe

GIC
Composite

sealing dentinal tubule

A-δ
fibres



Odontoblastic
process

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desensitising
with
pottasium
nitrate

Test :-

U-UBHY HND

14-07

7/3/23

First Internal test

8-
20

Rajaw

- 1. phoenix abscess:
- 2. Irreversible pulpitis.
- 3. Jngle's working length determination
- 4. pulp vitality tests.

1. phoenix abscess.

* It is defined as a 'acute inflammatory reaction super imposed as a symptomatic apical periodontitis in a chronic condition

* Also known as symptomatic secondary apical periodontitis.

causes:

* Instrumentation during root canal procedure

symptoms:

* Infected tooth elevated tooth socket of the inflammatory reaction of apex.

* Red swollen area around the infected tooth

* pain

* color change of the tooth in the early stage and it changes in the apical periadontitis.

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Radiographic features :-

* It looks like similar to apical periodontitis. It is differentiated in widening of pdl.

2) Treatment :-

* Drainage of abscess.

2) Irreversible pulpitis :-

* It is inflammatory reaction of pulp.

* It is caused by bacterial invasion

* Release of toxins leads to necrosis of pulp.

signs & symptoms :-

* spontaneous pain

* sharp pain during thermal changes

especially hot or cold.

* Nocturnal pain

* Intermittent pain

* pain during changing of position due to increase of pulpal pressure

* Cold pressure on the affected area to pain relief. But it also used for

the pain on long duration

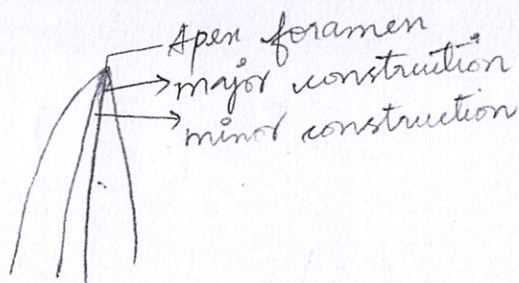
* pain in adjacent teeth also present

Treatment.

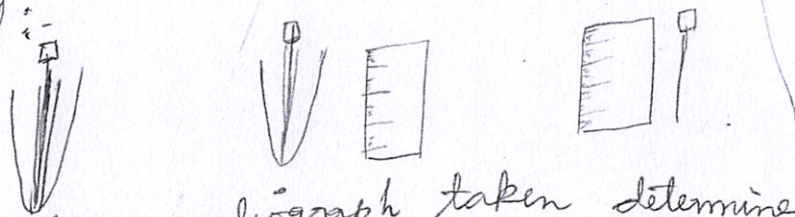
* Root canal treatment.

working length determination methods

- 1) Radiographic methods
 - a) Grossman
 - b) Ingle
- 2) Electronic method (apex locator)
- 3) Tactile sensation method
- 4) paper points



Ingle's method :-



Q₂ pre-operative radiograph taken determine the length of canal.

'Safety' allowance 1mm

Insert the file into the canal and post-operative radiography taken.

If the file insertion is insufficient extend the length and taken another radiograph.

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4. pulp vitality tests:

- * Heat test
- * cold test
- * percussion test
- * cavity test
- * Bite test

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Improvement test.

U. Ubayana.

IV - year BDS

17/4/23

18
30

Rijaw

Essay :-

1. classify pins. Write in detail about pin retained Amalgam restoration.

classification of pins & Types :-

- 1) Cemented pins
- 2) Threaded pins ✓

pins Retained Amalgam restoration :-
pin Retained Amalgam restoration is used to while restoring the Amalgam in the cavity preparation → used for the Retention.

Indication :-

It controls the leakage.

Types :-

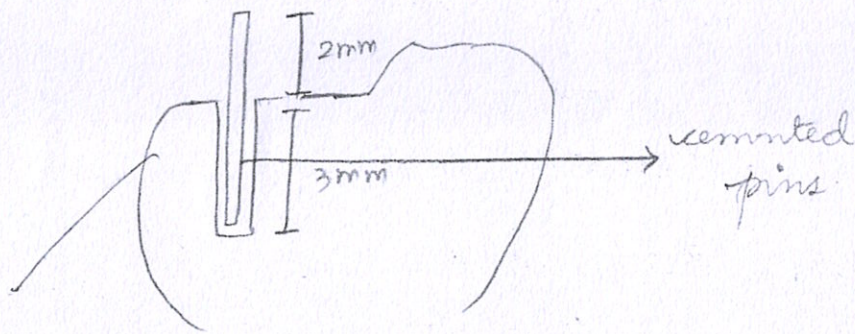
- 1) cemented pins
- 2) Friction lock pins
- 3) self threaded pins ✓

*Signature

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Cemented pins is used to place inside the tooth surface specifically, it has the chamber to place.

After that placing of cemented pins add or apply the luting cement in that chamber.

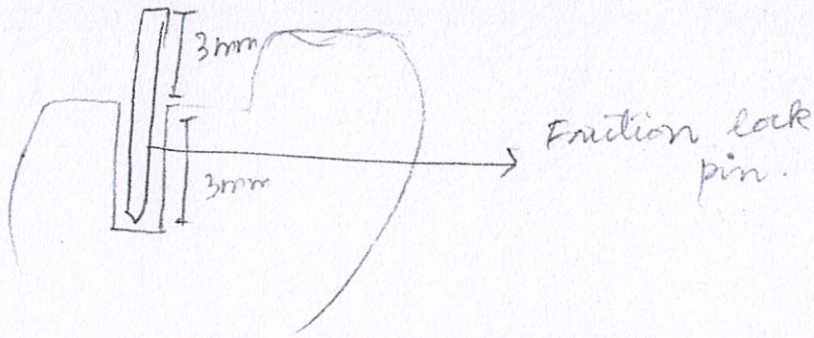


2) Friction lock pins:-

Friction lock pin is a type of pin restoration done by placing the pin inside the tooth structure which has the smaller pin channel compared to cemented pin channel.

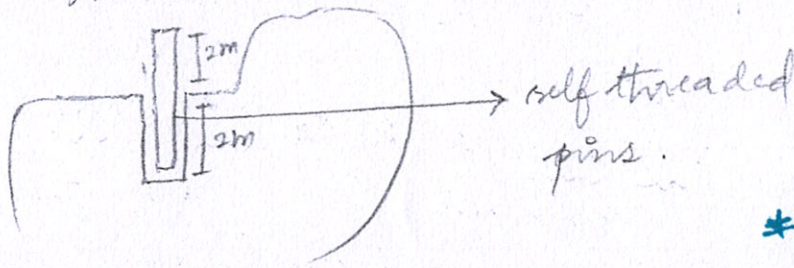
The pin is kept and tapped into the channel.

The pin placed inside where it has 3mm and outside of 3mm.



3. self threaded pins :-
 - self threaded pins has thread in
 inside of pins
 which has to placed inside
 the tooth

And it has more retention
 while compared to others type of pin.
 Inside 2mm & outside 2mm.



*=...tham

Designs:-

1. Regular
2. Minim
3. Minikim
4. Minuta

Indications:

control restoration in teeth that have
 pulpal / periodontal prognosis.

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- foundations
- Mutilated teeth
- Esthetics not concern & economics.

contraindications:

significant & occlusal problems
tooth can't be properly restored with direct restoration

Advantage:

conserve the tooth structure
minimum appointment time.

Disadvantage:

Dentinal microfracture
microleakage.

Decrease strength to amalgam.
pin retained amalgam restoration does not protect the structure.

pin type & Retention:-

- cemented pin - 5 to 6 times retentive
- Friction lock pin - 2 to 3 times retentive
- Threaded pin - least retentive.

No. of pins:-

For line angles one pins is placed.

**scriptum*
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* Bleaching:

Lightening of discolouration of tooth by the application of chemical substance where it oxidises the organic compound.

The preliminary step is by oral prophylaxis and polishing of teeth
Irrigate the access of cavity
Initially sodium perborate

Advantage:-

simple, safe procedure.
Reduce chair time

Disadvantage:

compliance of patient
effect of H_2O_2 .

2.

Treatment of dentin hypersensitivity:-
short & sharp pin exposed dentinal tubules comes in contact with stimulate thermal. theories:-

Direct innervation theory

Indirect innervation odontoblastic

process. Hydrodynamic.

placement of restoration

GIC

composite

use of laser

CO₂ laser

He : Ne laser.

By using of potassium nitrate

tributate.

calcium hydroxide paste

calcium phosphate paste

silver nitrate

Fluoride

Varnishes

**S. P. Han*

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