

قالوا سبحانك لا علم
لنا إلا ما علمتنا إنك
أنت العليم الحكيم

Luxation injuries in young permanent teeth

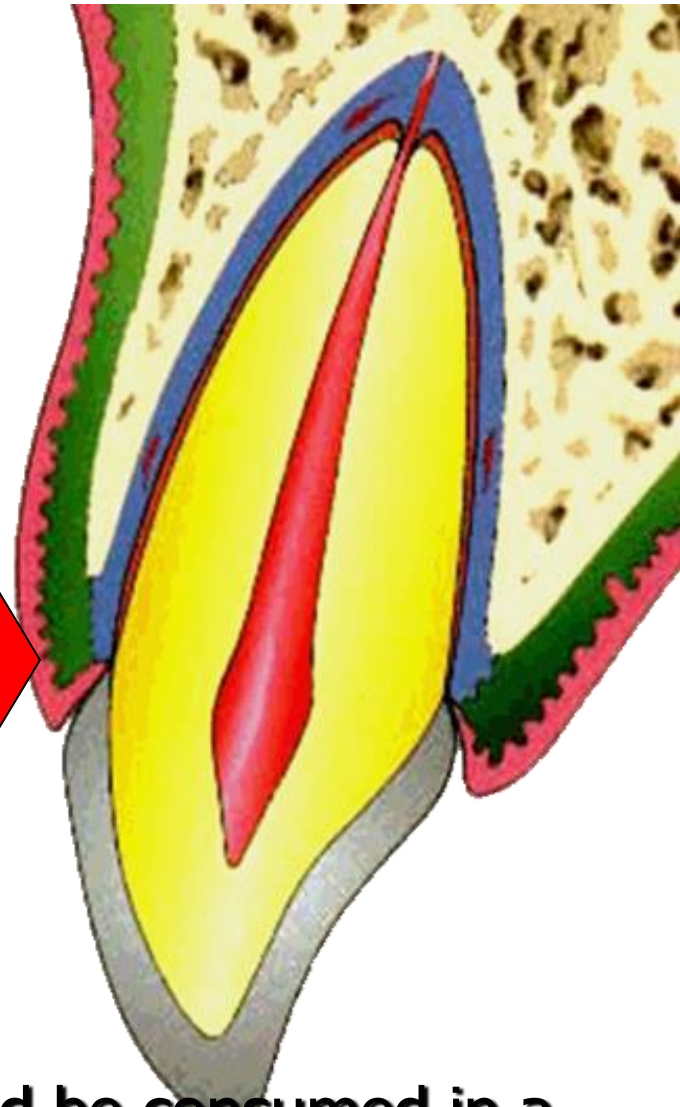
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Sharjah University, Cairo University

Last lecture we stopped here!



**Energy can not be
created nor destroyed.**



**The energy within the impact should be consumed in a
way or another!!!**

Diagnosis

1. Concussion

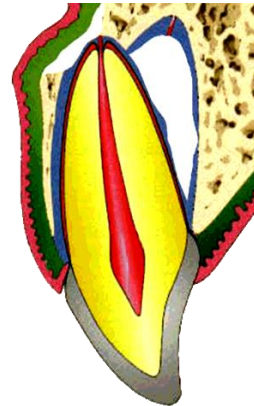
2. Sub-Luxation

3. Extrusive Luxation

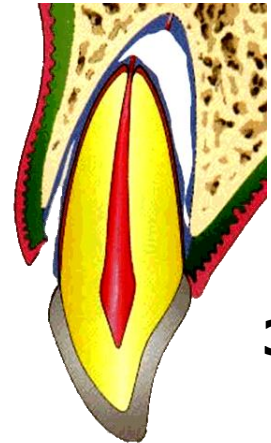
4. Lateral Luxation

5. Intrusion

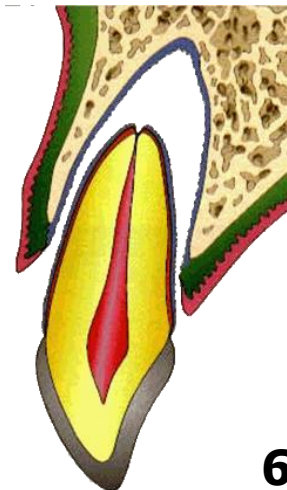
6. Avulsion



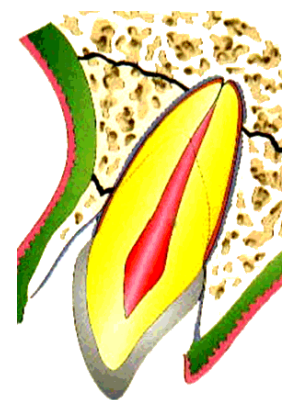
4



3



6



5

Concussion

- No or little Mobility.
- Slight tenderness.
- Vital pulp.



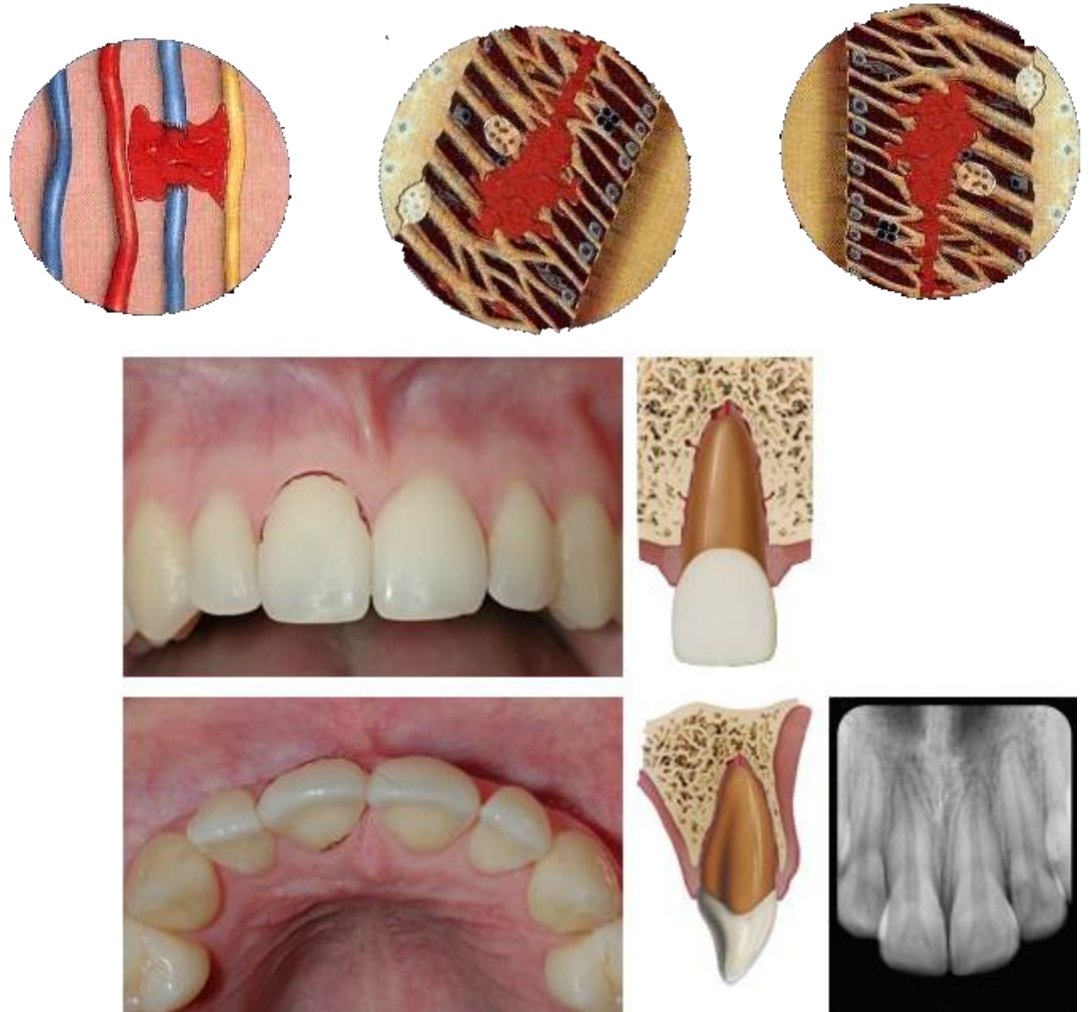
Treatment of Concussion

- Relief contact
- Splinting is not necessary,
Splint only to relief the
child.
- Careful observation and
watchful follow up.

Prognosis is Favorable

Sub Luxation

- Little Mobility.
- Tenderness.
- Blood in gingival crevice
- May lead to pulp necrosis.



Treatment guideline

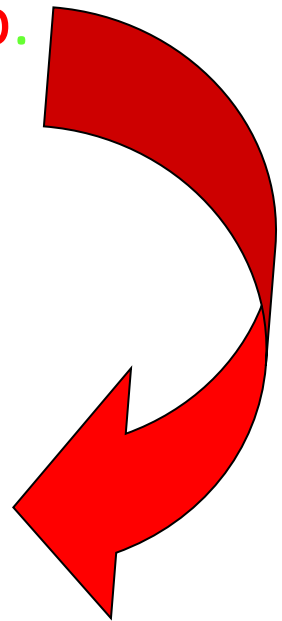
- Relief contact
- Splinting is necessary.
- Careful observation and watchful follow up.



Healing & Recovery



- Endodontics, Apexification, Bleaching



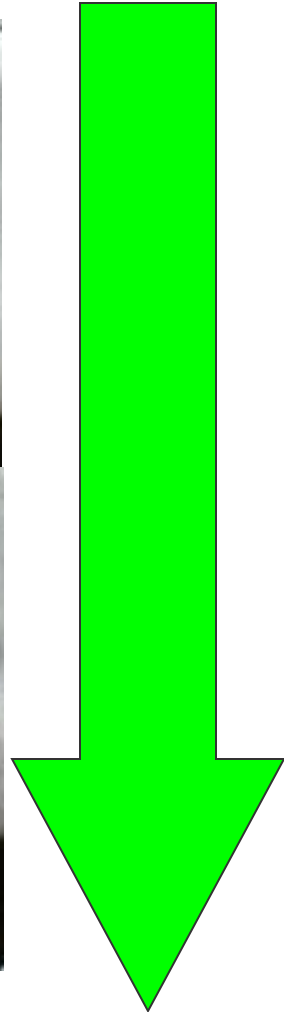
My Great Teachers



**They gave me money and experience.... Today I'll share with you
"Only the experience"**

8 Y O Teacher!!!

After 3 Months of Careful observation and watchful follow up.



Case #2 After 3 Years of Careful observation and watchful follow up.



What I learned from these children...



Factors Affecting Prognosis

1. Upper teeth have better prognosis because of rich blood supply
2. Open apex has better prognosis than closed apex.

14 Y O Teacher!



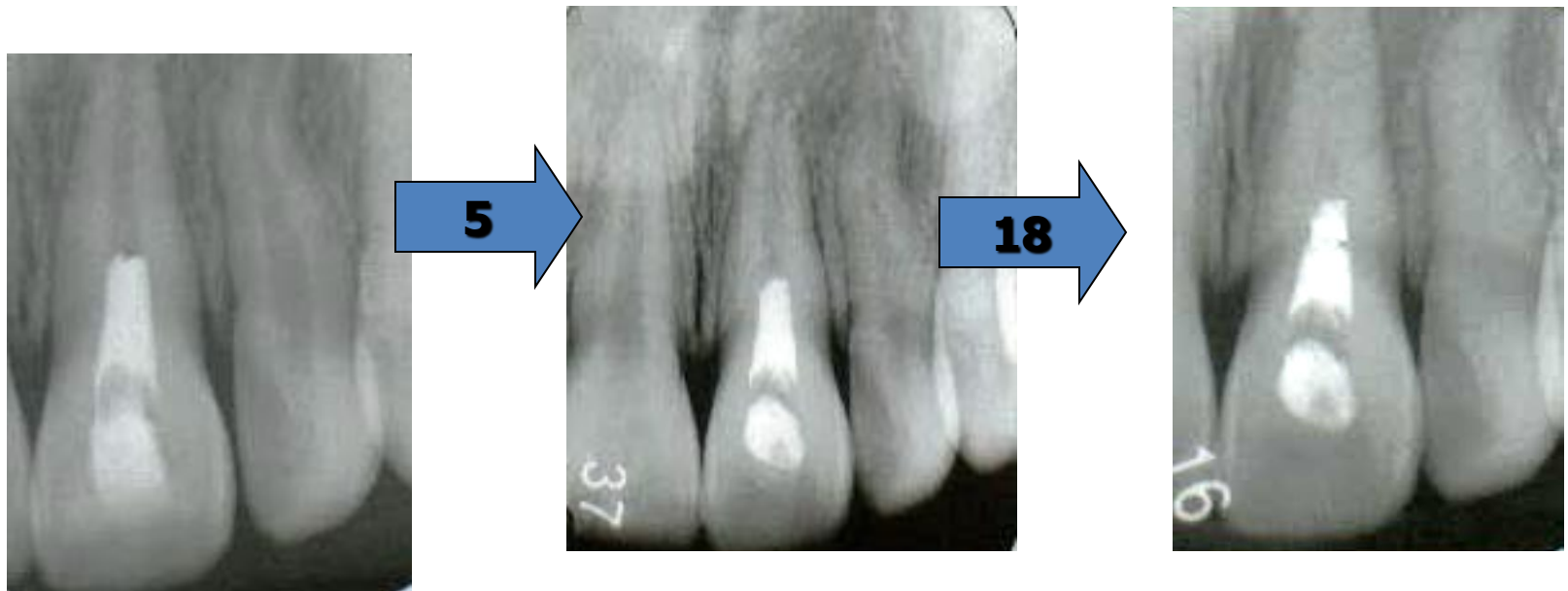
**No response to Pulp Testing in
Teeth 21 & 22**

One Month Later.....



**Tooth # 22 responded to EPT
while 21 changed its color!**

Oooops



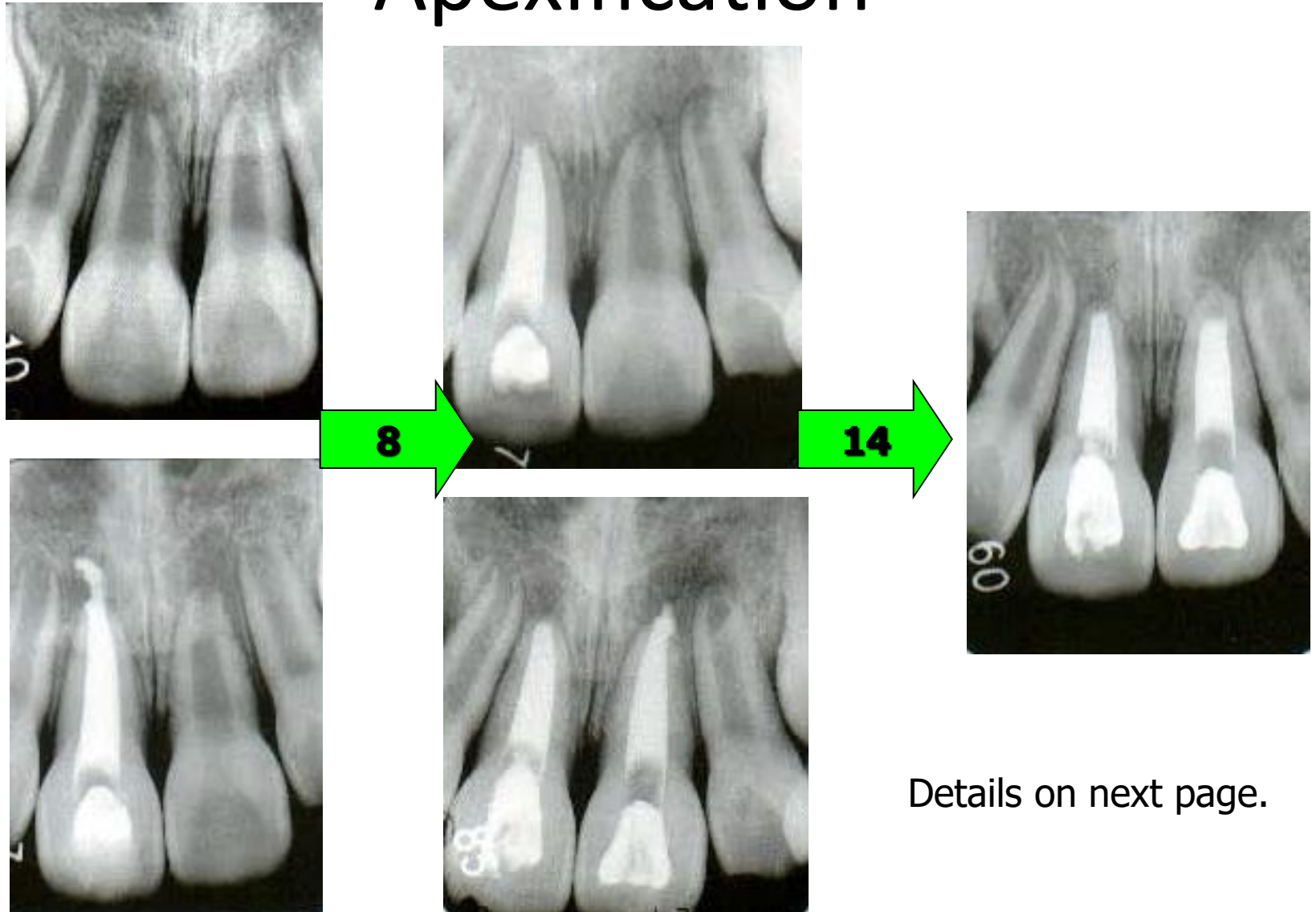
Radicular Pulp in 21 is found vital, accordingly capping the vital tissue with MTA was done to allow for apexification. (later we will discuss what is apexification)

What we might learn from this child...

- Limitations of pulp testing (sometimes you get False –ve and false +ve).
- Not all discolored teeth have necrotic pulps.
- Dystrophic pulp calcification can be left untreated as long as it's asymptomatic.



Apexification



Details on next page.

While treating tooth #11, periapical radiolucency on 21 was not noticed.
It was discovered after 8 months that 21 needs RCT.
The radiolucency overlapping the apex of 22 gave
a false impression that 22 is involved.
Tooth #22 was found innocent 😊 no RCT was needed for 22.

This Child may teach us some limitations of X-ray and
The importance of follow up

No single diagnostic aid will provide a diagnosis. All pieces of the puzzle should be put together in order to get the whole picture.

These are

1. History
2. Clinical examination.
3. Diagnostic aids (X-ray, pulp testing ...etc).

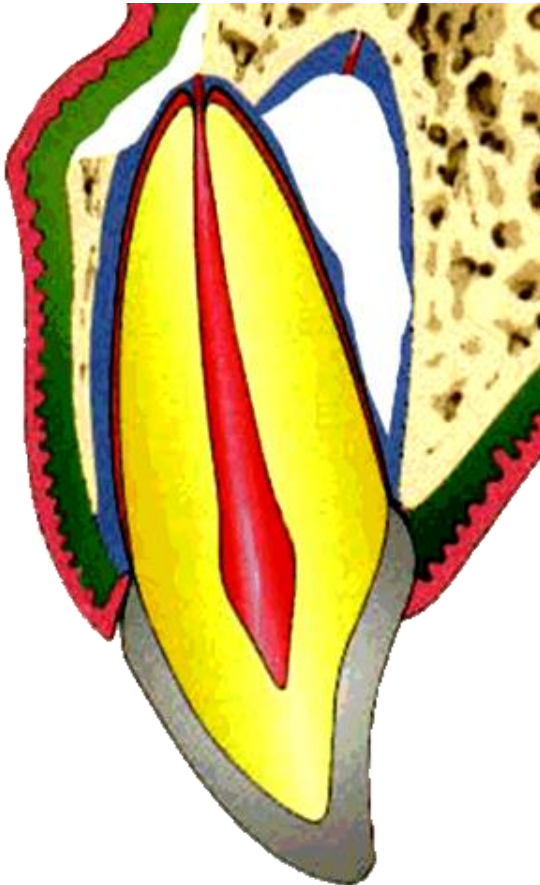
Extrusive Luxation

- Tooth is displaced coronally
- Looseness.
- No response for EPT.
- Bleeding from periodontal ligament.
- Widening of periodontal space in periapical radiographs



Lateral Luxation

Crown is displaced palatally
apex is displaced labially



- ~~Looseness.~~ Firm tooth
- No response for EPT.
- Bleeding from periodontal ligament.
- Widening of periodontal space in periapical radiographs

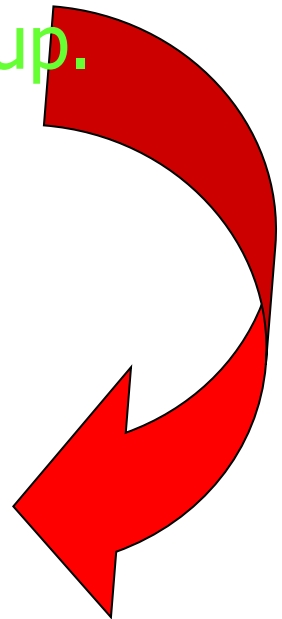
Treatment guideline for Ext. & Lat Luxation

- Put it back!
- Relief contact
- Splinting is necessary. For 4 weeks
- Careful observation and watchful follow up.

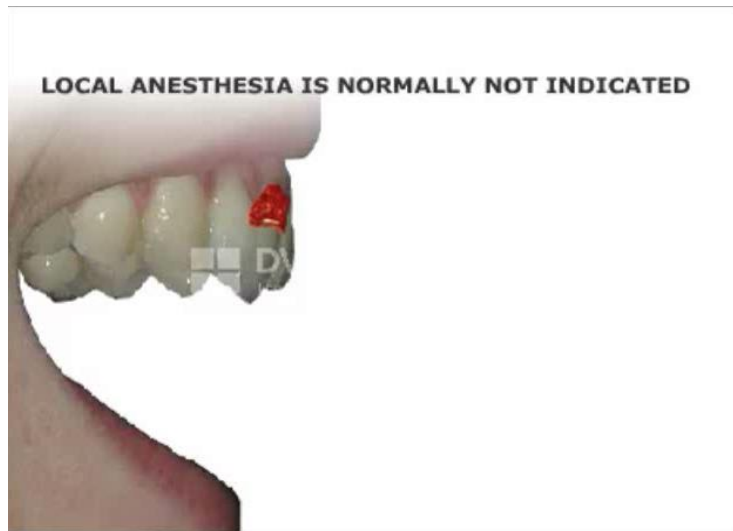
Healing & Recovery



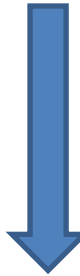
- Endodontics, Apexification, Bleaching



Two videos for managing Extrusive and Lateral Luxation ..



Back to our great teachers



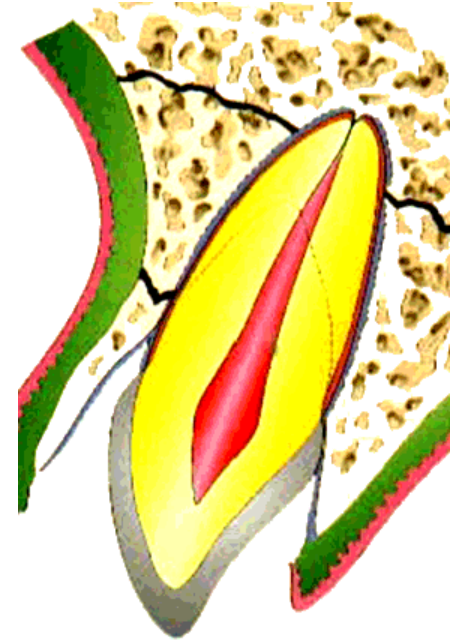
One Month Later! Loss of alveolar bone was noticed



We may learn from this child that during splinting period there will be an initial transient breakdown of tissues prior to tissue repair. Then everything will come to a happy end 😊

Intrusive Luxation

- The worst prognosis
- Associated with broken alveolus.
- Firm tooth.
- Needs periapical radiography to distinguish from avulsion.



Treatment options for Intrusion

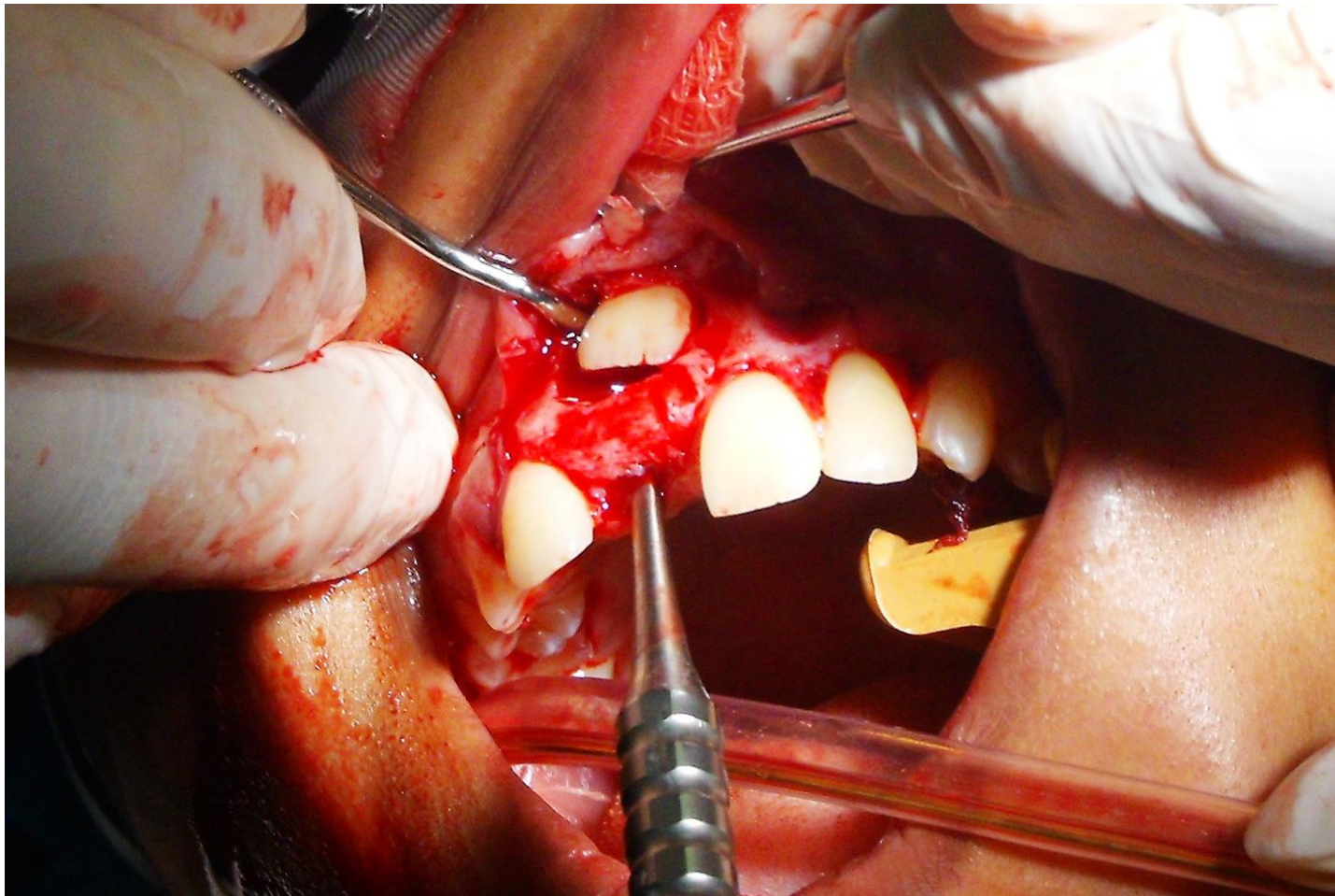
- Careful observation and watchful follow up.

Re-eruption is expected within 3 months for incompletely formed roots. Monitoring pulp condition is a must.

- Ortho-assisted re-eruption is indicated in fully formed roots, but it might fail should ankylosis occur.
- Surgical repositioning may produce a faster result.



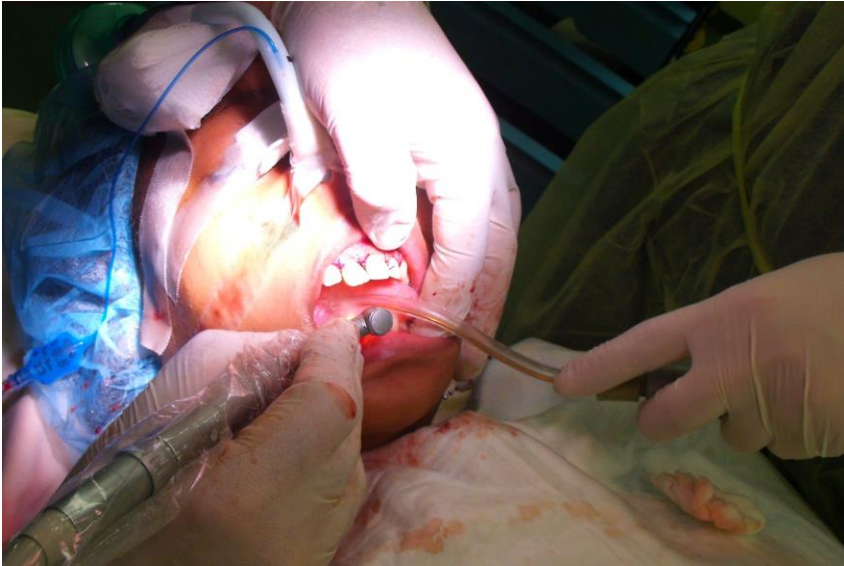
Surgical Repositioning



Surgical Repositioning



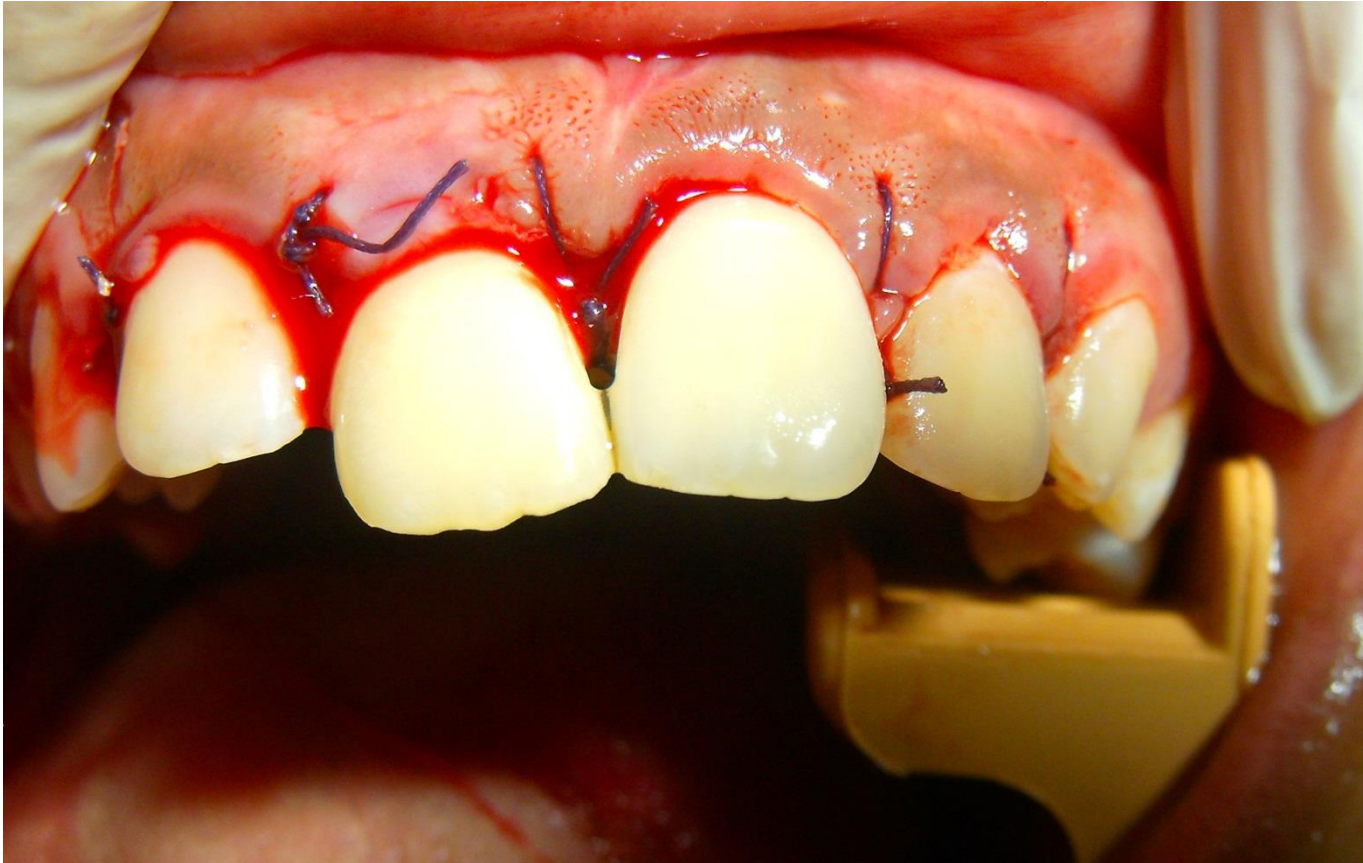
Surgical Repositioning



Here we are still following the same
(reliving the contact) scheme



just before a final push into position
and splinting



Nextwe will discuss total AVULSION



Don't' text
while
driving
otherwise
Mr. Isaac
Newton will
drive it on
your behalf

Avulsion (total separation) till we meet next week.

- Periodontal Ligament Death?
- Pulp Tissue Death?



Sh-Tails.org

**Which problem
has the priority?**

