

ABE Self Assessment Case Scenario #1

You are looking at a Periapical of #29 and clinical photos of the area. [see PAGE # 1](#)

Describe everything that you see?

Radiograph? Periapical area of #29? Adjacent teeth?

Clinical observations from photos?

21 year old, Asian female, in good health but who reports a prior allergic reaction to aspirin with rash and dizziness, when she took some three years ago. Tooth #29 is asymptomatic, non-vital to CO₂. The rest of the quadrant is vital to all tests and is normal on clinical exam.

What other radiographs, test results or clinical findings do you require to make a diagnosis? [See PAGES #2 and #3](#). Which show #20 also has dens evaginatus.

#20 is non vital to CO₂ and asymptomatic, the rest of lower left quadrant is vital and normal clinically.

Which population group does Dens Evaginatus occur most frequently ?

What is the prevalence of Dens Evaginatus in this racial group? Bilaterally?

Which teeth are involved most frequently involved?

What is the pulpal diagnosis for #29

What is the periapical diagnosis #29

What is your oral pathology differential diagnosis if #29 was vital and you did **NOT** think that the PA radiolucency was of endodontic origin?

What is the theory for development of dens evaginatus?

In what stage of tooth development does this occur in?

What are the other stages of tooth development?

In which stage is the formation of lateral canals hypothesized to occur?

Describe the steps that led to the necrosis of this pulp and formation of the periapical lesion?

Step 1.....

Step 2.....

Step 3.....

Step?.....

This a non vital case with fully formed apical foramen, how would you treat it?

What is the difference between Apexogenesis and Apexification?

What if there was an immature apex? How would you treat this case?

Do you use MTA or CaOH? Why?

In a revascularization via blood clotting attempt what is the biologic mechanism involved?

What is the treatment protocol?

Why is chlorhexidine used as an irrigant?

What is the definition of substantivity?

You have a patient who has had an allergic reaction to aspirin.

What analgesic would you prescribe for discomfort?

What other prostaglandin inhibitors would be contraindicated for this patient?

This patient has an acute allergic reaction during treatment. The patient becomes very red in the face, restless and experiences Shortness of breath. due to a tightness in the chest. The patient breaks out with hives, is itching all over, and is agitated. The eyes and nose are itchy and watery. Her pulse is rapid and thready and the BP is falling.

What is the emergency treatment you need to provide?

What research suggests that it is stronger for the tooth to be filled with an acid etch composite restoration instead of a gutta percha fill in these cases to increase fracture resistance?

What is the restorative treatment for a tooth with Dens Evaginatus if it is still vital and has a fully formed apex?

What type (color) of MTA would you use in treating a case like this? What literature suggests that gray is better than white for use as an apical plug?

What is the prognosis for this case?

What is the literature support?

What is the leading cause for failure in apexification procedures? Who said so?

ABE Self Assessment Case Scenario #2

You are looking at a Periapical of #10 and clinical photos of the area.

See PAGE #1

Describe what you see?

Tooth #10 radiograph apical area and lateral area of root?

Tooth #10 post perforation?

Clinical observations?

48 Year old Female Caucasian with HX. of Mitral Valve Prolapse. Allergic to Sulfa drugs and Penicillins. No other reported medical conditions, diseases or allergies to medication(s). BP 114/68 Pulse 68.

Today a sinus tract is present, tooth is asymptomatic now but was causing spontaneous discomfort one week ago. Patient has been taking analgesics which have eliminated her symptoms. RCT, cast dowel/ core and PBM, done 4 years ago. Periodontal pockets, all less than 3 MM. Adjacent teeth are vital and asymptomatic.

What additional radiographs, tests or clinical findings are needed for your diagnosis?

See PAGES #2 AND #3

Would CBCT scan be beneficial in treatment planning this case? Why? Risks? Radiation exposure comparison to single digital PA? Literature?

What is your pulpal diagnosis?

What is your periapical diagnosis?

What is the diagnosis for the lesion associated with the perforation?

Histologically what would we see at the periapical area? Hint: Failing prior endodontics.

Histologically what would we see adjacent to the perforation?

Bacteria types at either site?

What caused this tooth to fail endodontically?

Describe the mechanisms?

Bacteria present in a untreated vs. failing endodontically treated teeth are different. Compare and give some examples?

What is the treatment plan for this tooth?

What type of retx. and repair? How come?

Why conventional retreatment? What about removing the cast post? How?

Surgery only? Why?

This patient has been taking 12 tablets of 325 mg aspirin each day for one week for her discomfort and you are scheduling her for surgery, what are the side effects of her aspirin use and when should you schedule the surgery?

Does this patient require prophylactic antibiotics to prevent infective endocarditis for her surgery?

Name the FOUR cardiac conditions with the highest risk of adverse outcome from endocarditis for which is prophylaxis with dental procedures is reasonable.

She's allergic to Penicillins. What is her recommended antibiotic and dosage?

This tooth was restored with a cast dowel/core from the radiographic appearance.

What element(s) of a cast dowel and core makes it stronger than a prefabricated post and core of either alloy or composite?

Are posts required in all endodontically treated teeth? What is the research on the length of a post?

Anterior teeth? Posterior Teeth? What is the function of a post?

What material do you use for internal repair of post perforations. How come? What is material you use composed of?

What is your prognosis for this tooth?

What is the success rates of teeth retreated conventionally with perforations? Literature?

What does the literature say about success rates of teeth conventionally retreated compared to those which are not retreated conventionally but only surgically?

ABE Self Assessment Case Scenario #3

You are looking at a Periapical of #7 and clinical photos of the area [See PAGE #1](#)

Describe what you see?

Tooth #7 radiograph apical area?

Clinical observations?

60 year old, Male Caucasian. Hx of Hypothyroidism. Current PO medications: Levothyroxine 0.15 mg daily, 81 mg ASA, once daily, Naproxen 375 mg BID, as needed for arthritis pain. No other reported medical conditions, diseases or allergies to medication(s). BP 125/82 Pulse 78.

History: No sinus tract present, symptomatic, treated by yourself and observed periodically for 2 years with no periapical healing. It was asymptomatic until now. Periodontal pockets, all less than 3 MM. Adjacent teeth are vital and asymptomatic. #8 tx'd endodontically. No history of trauma, normal mobility. Healthy per medical history.

[See PAGE #2](#)

What additional radiographs, tests or clinical findings do you need to make your diagnosis?

This case was followed for two years.

What does the literature suggest for re-evaluation times?

What about a CBCT scan? Benefits?

Can Cone Beam CT help in the diagnosis of true cysts? Who did the study?

What is your pulpal diagnosis?

What is your periapical diagnosis

Bacteria flora expected at the periapical area of this tooth? Name some.

What histology would we find in the periapical lesion?

Why did this lesion fail to respond to your conventional therapy?

Some reasons other than a true cyst?

From what tissue do cysts develop from at the apex of necrotic teeth?

What is the treatment plan for this tooth? What type of retx? Why conventional retx? One or two visit? Would you use CaOH interappointment and why?

Surgery only? Why?

Retro material choice? Literature support for your material choice?

How much apical area do you remove? Why? How deep a retro prep and why?

Type of flap design and why?

If I told you I had used resilon for this fill, would it change your treatment plan? How come?

What irrigants would you use? How did you decide on what you use? How do you deliver them? What is your literature support for your technique?

How would you remove the existing filling material for a conventional retx?

This tooth starts to cause a cellulitis (facial swelling and fever)

What are the four anatomic group categories for fascial space infections?

Which group would be involved with this specific tooth?

What are the four facial spaces that compose this group?

How are you going to treat this swelling and what antibiotic would you use and why?

What is your prognosis for this tooth?

What is the success rates of teeth retreated conventionally a 2nd time by the same endodontist?

How many times would you retreat the same tooth conventionally before considering surgical retreatment?

What does the literature say about success rates of teeth conventionally retreated and those which are not retreated conventionally but only surgically?

What are the comparative success rates between conventional retreatment and surgical retreatment?

ABE Self Assessment Case Scenario #4

You are looking at a Periapical of #19 [See Page #1](#)

Describe what you see?

Tooth #19 radiograph apical area?

Distal midroot?

Clinical observations?

What additional information, x-rays or clinical findings do you need for a diagnosis?

Show rest of this cases' PA's. [See pages #2 thru #5](#)

66 year old. Caucasian Female. HX of HBP and treatment for osteoporosis. Meds: Amlodine 2.5 mg/daily, Resedronate 5 mg/day for the last two years. BP 125/70 Pulse 70. No other reported medical conditions, diseases or allergies to medications.

#19 Tender to percussion and palpation.

History: Treated in 1994, 6 years prior by yourself. At that time you did a bonded alloy repair of a midroot resorption and a conventional gutta percha fill.

What is your pulpal diagnosis?

What is your periapical diagnosis?

What type of resorption was this?

What would we find histologically in the resorption area?

What are the other classifications of internal resorption?

What are the external resorption classifications?

What are the cervical resorption classifications? Who created them?

Are the mechanisms involved in external resorption different from internal resorption?

Mesial root periapical lesion has become symptomatic 6 years later. [Why is this failing?](#)

The distal root appears healed. Why the mesial root failure and not the distal?

What is your treatment plan for this tooth now?

Justify from the literature your treatment plan?

If your treatment plan is to do surgical retreatment of only the mesial root, how come?

If your treatment plan is conventional retreatment would you be doing a 1 visit retx or a 2 visit retx? All roots or just the mesial? Why?

Would you use CaOH Interappointment? What are you trying to accomplish by using it?

Do you think this tooth needs to be extracted and replaced with an implant instead?

Why? Support your position based on the literature.

You decide to treat this tooth surgically, the patient has been taking oral biphosphonates. What is your understanding of the literature and AAE position statements regarding this medical issue?

This internal resorption case was treated with a Bonded Alloy. What other repair materials are available?

Which would you have chosen instead of alloy? Why?

Success rates of teeth with internal resorption?

What are the success rates for this tooth, which has had internal resorption and was surgically retreated without conventional retreatment?

Is there an literature support for surgical treatment having a higher success rate instead of conventional retreatment in this particular case?

ABE Self Assessment Case Scenario #5

You are looking at a Periapical of #19 [See page #1](#)

Describe what you see?

Tooth #19 radiograph apical area? Pulp Chamber?

Clinical observations?

50 year old Male Caucasian with HX of HBP. Medications: Atenelol 100 mg/day. No other reported medical conditions, diseases or medication allergies. BP 147/99 Pulse 63.

#19 is tender to percussion and palpation, buccal sinus tract probes into furcation. FVC-PBM is temporarily cemented. General practitioner was waiting on final cementation until symptoms improved but instead they got worse with intraoral swelling and discomfort. Other periodontal pocket reading on #19 are 3 mm or less including area adjacent to mesial crack.

[See pages #2 and #3.](#)

What other radiographs, test results or clinical findings do you require to make a diagnosis?

What is your pulpal diagnosis?

What is the your periapical diagnosis?

What are the pulpal changes in the pulp chamber?

What caused the pulpal changes?

What would we see histologically?

This turned out to be a 5 canal – 4 rooted lower molar. What other anatomical variations can be present in a lower first molar? What percentage of each type? Literature references?

Which other teeth could we expect to have referred pain from #19? Who did the study?

Trace the nerve pathways of #19 back to the brain stem. Explain the nuerologic basis for the phenomenon of referred pain.

What type of bacteria would we likely find in the periapical area of this tooth? Please list some examples.

What is your treatment plan for this tooth?

One or two visits treatment? With or without Interappointment meds? Why?

How large and how long would you instrument this case to? Why? What literature support can you give for your instrumentation technique?

Re-evaluation time frame, when and why?

You want to address any potential coronal leakage issues when you place the buildup, what would you use and why?

Is coronal leakage a contributor to endodontic failure? Who supports your position?

Antibiotics in this case? Why or why not, supported by literature.

This patient is taking Atenelol.

What type of drug is this?

What are the dental management considerations for patients taking this drug?

This tooth has a mesial margin crackline present. Explain how it may affect the outcome of this case.

There is no crackline visible ACROSS the pulpal floor and no distal margin crackline present. Does this change the prognosis for this tooth?

What are the success rates of conventional treatment with a periapical radiolucency?

Who says so?

If this case failed to respond to conventional treatment. How would you treat it further?

If you decided on surgical treatment, would you place retrofills in ALL the roots? Why or why not?