Just got out of dental school and had a patient today with a good-sized swelling around #4. Another doctor at the office suggested I send the patient home with antibiotics and wait for a couple of days before I extract, due to the fact that it would have been almost impossible to get them numb.

Would it have been better to do an I&D right then, even though we couldn’t have gotten them numb? I was able to get a little bit of pus out by milking it with my fingers. But the patient couldn’t tolerate that for too long. Thanks for the help.

Welcome to DT!

This is for sure a controversy and you will get multiple opinions. I have been taught in my residency to (pretty much) always incise when there is an infection because you do not know if the antibiotics will work or not, and then you end up with a space abscess—I have seen that many times, regardless of the antibiotic used. It is also Friday today, and if the infection does go up into the canine space it is not life-threatening, but it can progress and end up with a trip to the ER over the weekend.

Particularly in an area like #4, you will for sure be able to anesthetize enough to be able to put a blade into the abscess and let it drain. If a tooth needs to come out, that may sometimes be a little trickier depending on the tooth, but once you drain, you at least gain enough time to make that decision later.

Best wishes for a successful career.

I have done it both ways. For me it is a matter of discerning how well the patient will deal with treatment. If they are phobic and are going to be a pain in the rear, I will RX some antibiotics and reappoint for one week to make my life easier.

If it is a nonphobic patient who is easy to work on, I will just numb the heck out of them and get the tooth out. Most minor abscesses will do just fine with penicillin or amoxicillin. If somebody comes in with a huge swollen face, they get Augmentin.

I think the primary mindset one should have when they see an infection (swelling) should not initially be pulling the offending tooth but rather to get the infection under control. Being able to get the tooth out the same day should be considered icing on the cake.

The drug of choice to treat an abscess is a knife. If there is truly a collection/pus/abscess, antibiotics will do nothing, especially oral antibiotics. It must be drained. If the infection is still in the earlier cellulitic stage, then antibiotics have a role in treatment. Of course you commonly have the mixed presentation of a collection with overlying facial cellulitis—in this case an I&D needs to be performed and the patient placed on antibiotics.
If in doubt, anesthetize and stick a knife in the free mucosa buccal to the offending tooth. You may or may not get anything out, but now you have created a pathway for purulent drainage should it develop—this is the thought process behind making an incision next to the offending tooth even if you're unsure there is a collection. This shouldn't be a big problem in the vast majority of patients—they may whine and moan a bit but almost always feel better afterwards because the lesion/swelling has been decompressed.

The subset of patients I would watch out for or refer are those who are anticoagulated. Even in those you can safely aspirate the fluctuance with a large-bore needle (18g) to investigate for pus and to decompress lesion.

Regardless of the circumstance, antibiotics are an adjunct, rather than the recommended primary treatment of choice, which is an incision and drainage. If you are lucky, you can get profound anesthesia to be able to extract the tooth, but in a decent amount of cases this will not be possible, so you will need to let the drainage and ABX work for a few days. Reappoint within one week and then take tooth out if this is the case.

Also, I disagree with one of the above posts regarding basing treatment decision on the demeanor of the patient. Whether they are a PIA or not, it is our duty to treat them appropriately. I would recommend immediate referral to a colleague or OS for the I&D (not emergency room—ER docs for most patients won't try to drain intraoral abscesses) if you're uncomfortable performing the procedure. Of course, if presenting with floor-of-mouth hardness, firm neck, Ludwig’s appearance or severe orbital cellulitis they need to go to ER immediately (and preferably an ER at a hospital that has OMFS consultants).

Control the infection by removing the source of infection. I am very surprised to hear you talking about not getting the tooth out the same day if you are an OMFS resident. I am a general dentist but worked for a good amount of time with OMFS residents in a community health environment. We saw lots of infections and abscesses and would always take the tooth out.

We would use a lot of anesthetic and the vast majority of the time would be able to comfortably anesthetize the patient. I cannot ever remember a single time when we placed the patient with an abscess on antibiotics, did an I&D and brought them back without taking the tooth out.

We had some patients refuse treatment, but it was never because we weren't willing to take the tooth out. I even saw an attendant stack tongue depressors in a patient’s mouth with trismus to stretch them open to remove an infected wisdom tooth.

Thanks for the reply. I agree with your assessment of removing the source of the infection—it has to be done eventually and, in an ideal world, done same day. And in the majority of patients that we see at our dental school/VA/hospital clinic who have overlying infections, we love to take the teeth out same day and, for the most part, are able to anesthetize and do so.

However, for minor infections that come into the emergency room that need drainage, we do not take teeth out because the ER is not equipped to do so (dental radiographs, instruments, drill, lighting, etc.). On these cases we do a sufficient I&D, sew in a drain with a nonresorbable or longer-lasting resorbable suture (to assure that it stays there and to force follow up), usually place on ABX as an adjunct, and direct them to one of our clinics or a community health clinic for proper follow-up and tooth removal.

Major infections we will admit for IV antibiotics and usually take to the OR, or occasionally sedate in clinic for incision and drainage with offending tooth extraction (assuming source is dental). In the vast majority of cases under GA or sedation, the tooth can be removed concomitantly, but I have seen probably three or four situations where the trismus was so severe that despite the use...
of paralytics and the strongest mouth props available, it was physically impossible to open the mouth enough to access the offending bombed-out (usually wizzie) tooth. In those cases we had to take the patient back to the OR a few days later after the original I&D once the cellulitis and trismus had improved such that we could adequately get to the offending tooth.

With a proper I&D, with drain placement and addition of antibiotics, you can safely contain/control these dental infections until the tooth can be removed (or maybe RCT’ed if patient wants to save tooth and it is restorable).

I think the important concept in play (that several posters have agreed with) is that if there is a developing infection or abscess, that something surgical needs to be done to intervene, whether it’s I&D, extraction, or both, as opposed to neither with only Rx of oral antibiotics and hoping for things to get better/waiting for things to get worse.

Thank you for your reply as well. It really cleared things up for me and we are on the same page. Being in the ER without oral surgery tools is obviously a reason you can’t get the tooth out the same day and an I&D plus antibiotics is clearly superior to antibiotics alone. Severe infections and trismus requiring OR visits and IV antibiotics are a different level.

However, I think responding directly to the original post with an infected #4, there are going to be very, very few circumstances where I can’t get that patient numb and the tooth out, assuming I have the time and right equipment. I feel that it should be the exception that we place someone on antibiotics and bring them back, not the rule. I have seen—as I am sure you have—that approach, only to have the infection grow out of control and require more advanced interventions that maybe could have been avoided by getting the tooth out.

Thanks again for your response. These are the times I really learn from Dentaltown.

You’re right it was extremely uncomfortable; however, this patient was headed towards Ludwig’s. Antibiotics alone were not going to solve this problem. While uncomfortable, he got the tooth out, got a drain in, kept the patient out of the hospital and out of danger. If he hadn’t it was probably headed toward a situation lux8teef described in one of his posts with OR visits and IV antibiotics, etc., and hospital stays. Neither option was going to be fun.

Realistically there are only two definitive treatments for an abscess of dental origin: extraction or RCT. Both warrant the drainage of pus if there is any to be drained. Antibiotics alone are, as we all know, ineffective.

The problem with not draining the abscess and placing the patient on antibiotics with the thought to bring the patient back after a week to address the situation is that if the situation worsens and the patient subsequently requires hospitalization or develops other morbidity related to the delay, and if litigation ensues, this position will not be defensible, in my opinion. It will not be defensible for the simple reason that it is not the standard of care among that subset of dentists whose expertise lies in this area—the OMFS.

I do not think any OMFS expert witness will agree with this method. They will suggest what has already been posted here: remove tooth and drain, or provide drainage for the abscess if extraction is not feasible at the time of exam or if RCT is planned. While I agree that the likelihood of a small vestibular swelling in the maxilla progressing to a cavernous sinus thrombosis or a thrombosis of the orbital artery, etc., is very small, it does happen from time to time and you only need one to cause you a lot of sleepless nights and possibly a whole lot of coin and negative rep.

I am all for patients participating in their care. In this particular instance they can and do still have a choice that they can participate in. They have the option to permit the treatment you are offering, or they can seek a second opinion. This should always be offered in my opinion.
The doctor should not, however, modify treatment based upon the patient’s request in this particular instance.

And as far as research or evidence on this matter, I really couldn’t say and maybe it’s high time someone did the study if it has not already been done. But not all standard-of-care issues come from studies (unfortunate as this is). In some instances, such as this, the standard is determined by what the group of specialists who are viewed as the experts (again—in the eyes of the court) presented with this situation would commonly do and agree to as a consensus.

The exception to all of this would be if you were to prescribe antibiotics as a bridge after you referred the patient to a specialist for definitive treatment. ■

6/29/2014

I deal with this daily. Seriously. Had two today. If there is fluctuance, I always I&D and Rx AB at least. I sometimes will remove the tooth that day—depends. If it’s severe I refer to OS. When I first started, there was no OS for an area the size of Connecticut, so I ended up dealing with some serious infections … like it or not. It was what it was. Scary. No one died. Good or lucky. I don’t know.

Now if it’s crazy (one or two a year) I refer to OS for sedation, TE. I am appreciative of that. We have an office 45 minutes away now. If you haven’t had that option realistically, not sure you really can appreciate it enough. Always easy to second-guess when things don’t go well, I suppose. Some folks make an amazing living off of it. ■

7/3/2014

I had a woman come in two days ago with #30 bombed out, large PA lucency, an obvious vestibular pus collection, and tenderness below her mandible (but no fluctuance). Poor lady was visiting from out of town and this blew up on her. She saw a local general dentist who referred her over to me same day.

Fortunately she was NPO so I sedated her, cow-horned out the tooth, and stuck a knife in the pus pocket. Took about four minutes total once the Propofol ran in. She had no insurance and these patients usually have no money either, in my experience. But she actually paid cash in full. I was going to do it for her anyway but I always have my girls see if they can pay. Saw her back today and she’s doing great and very appreciative. ■

7/3/2014

I just got home from seeing a long-standing patient on the evening of July 4. The patient had a bone graft and implant placed in site #9 three years ago. The restoration was screw-retained. The case is far from ideal. He called me today saying he heard a “snap” and the tooth has moved. The implant platform is deeper than ideal and the implant diameter is 3mm.

Long story short: I went in to see him to help. I also went in to hopefully prevent the soft tissue from growing over the implant. The abutment screw fractured. I was unable to get the part of the screw that is in the implant body removed after trying for half an hour. I decided to bond the restoration to the adjacent teeth with composite resin. On Monday I will be ordering a Rhein abutment screw removal kit. I hope they have a kit that works for a XiVE 3.0 implant. I missed the fantastic fireworks this year. ■

7/5/2014