

# SMS Questions



## **Why do you take a full maxilla cbct scan to detect a vrf in one single tooth?**

In the clinical study the CBCT scans were taken with the smallest field of view (FOV). There is absolutely no justification for taking a full maxilla/mandible scan for possible diagnosis of a vertical root fracture in one single tooth. On the in-vitro study when we examined extracted fractured teeth placed in human dry mandibles, we used the field of view that was available at the time with the I-CAT CBCT scanner.

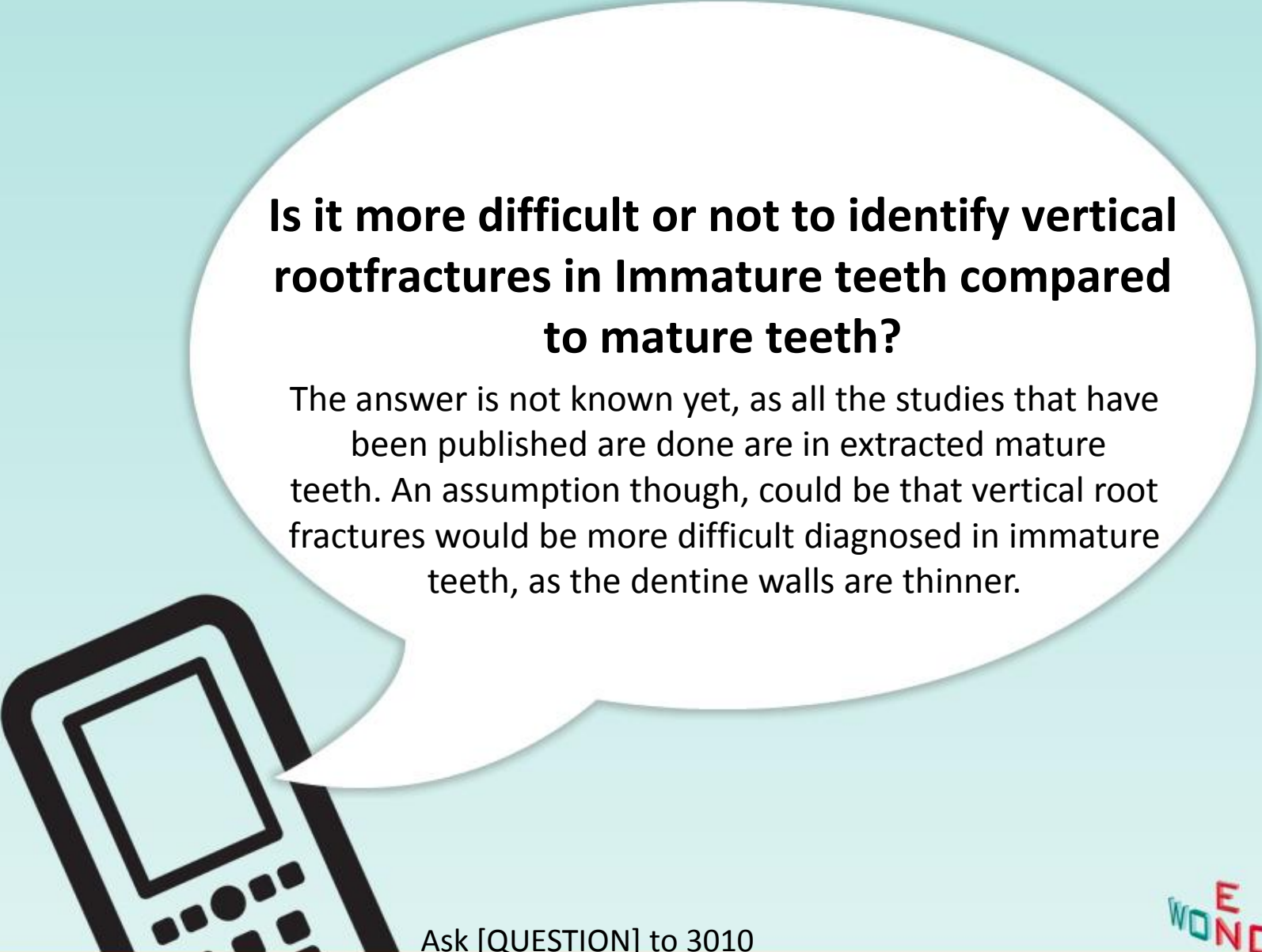
Ask [QUESTION] to 3010



**Would you say that a CBCT is able to clinically diagnose an asymptomatic vertical microcrack in vivo?**

If the size of the microcrack is smaller than the voxel size of the CBCT scanner used, then the microcrack would not be seen. However, the actual size of naturally created vertical root fractures, or microcracks is not known still.

Ask [QUESTION] to 3010



**Is it more difficult or not to identify vertical rootfractures in Immature teeth compared to mature teeth?**

The answer is not known yet, as all the studies that have been published are done are in extracted mature teeth. An assumption though, could be that vertical root fractures would be more difficult diagnosed in immature teeth, as the dentine walls are thinner.

Ask [QUESTION] to 3010

## What might be the reason vital teeth sometimes also show a lesion?

Hope I also answered. Those are so called false-positive readings of the scan.... normal anatomical structure of the bone superimpose on an apical part of the root (like the bone trabeculae) and you might think is a lesion. Bear in mind that so called "vital" teeth can be actually chronically inflamed at histological level, and this might be seen on the scan as an enlarged periodontal ligament.

Ask [QUESTION] to 3010

## **How do you distinguish void from scatter**

Hope I answered. Scatter is hard to see on all 3 planes in the same specific place. Void is quite good identified in all 3 planes, in the same spot, if it exists there.

Ask [QUESTION] to 3010

## **Why is scatter sometimes white and other times black?**

It's important to make a distinguish between scatter and beam hardening, beacuse they are not always the same. It is dependend of which anatomical structure gives the artifact or which filling material.

Ask [QUESTION] to 3010



**How do you justify all this radiation and your relatively large irradiated volume ?**

all scans were limited FOV, and with this specifically scan software which I used, you can also see the exact amount of radiation you gave in that specific patient, and all were within the normal limits of a scan with limited FOV: around 15-20 microSieverts

Ask [QUESTION] to 3010

**I am not satisfied with the answer about scatter. Would you please try again?**

Unfortunately probably nobody is very happy with what we know so far about scatter and beam hardening. We are still in the learning curve of reading and adjusting those images with CBCT scan.

Ask [QUESTION] to 3010



## **Do you really need 4 IT-PEOPLE In your practice for using cbct?**

yes, we have 1 doing IT support for whole practice (9 surgeries), 1 doing CBCT related stuff (eg using software to produce 3 d images, operating 3D printers to produce CAD/CAM models) and 2 writing imaging software for 3D imaging. How many do you have?

Ask [QUESTION] to 3010



**What is your suggested treatment  
after succes on xray and failure on cbct?**

review in 1 year, there are no  
guidelines on this-still very early days.

Ask [QUESTION] to 3010

**Is the dentist legally liable for misinterpreting/missing pathologies when using CBCT scans for endodontic treatments (ie. Osteosarcomas, osteomyelitis)?**

**In the UK YES**

Ask [QUESTION] to 3010

**Case 1 and than what? Www?**

follow up in another year



Ask [QUESTION] to 3010

**CBCT has poor resolution, but can detect rootcanals. Are you able to detect something small as crowninfraction?**

who knows! no research -good MSc project!!!

Ask [QUESTION] to 3010

**Why do you define outcome as complete healing? Where other disciplines in medicine define treatment results in alleviation of disease or healing of disease.**

I did not, I mentioned it to highlight the variety of classifications uses

Ask [QUESTION] to 3010

**Is endodontic evaluation with conventional radiographs alone useful at all**

**NO**



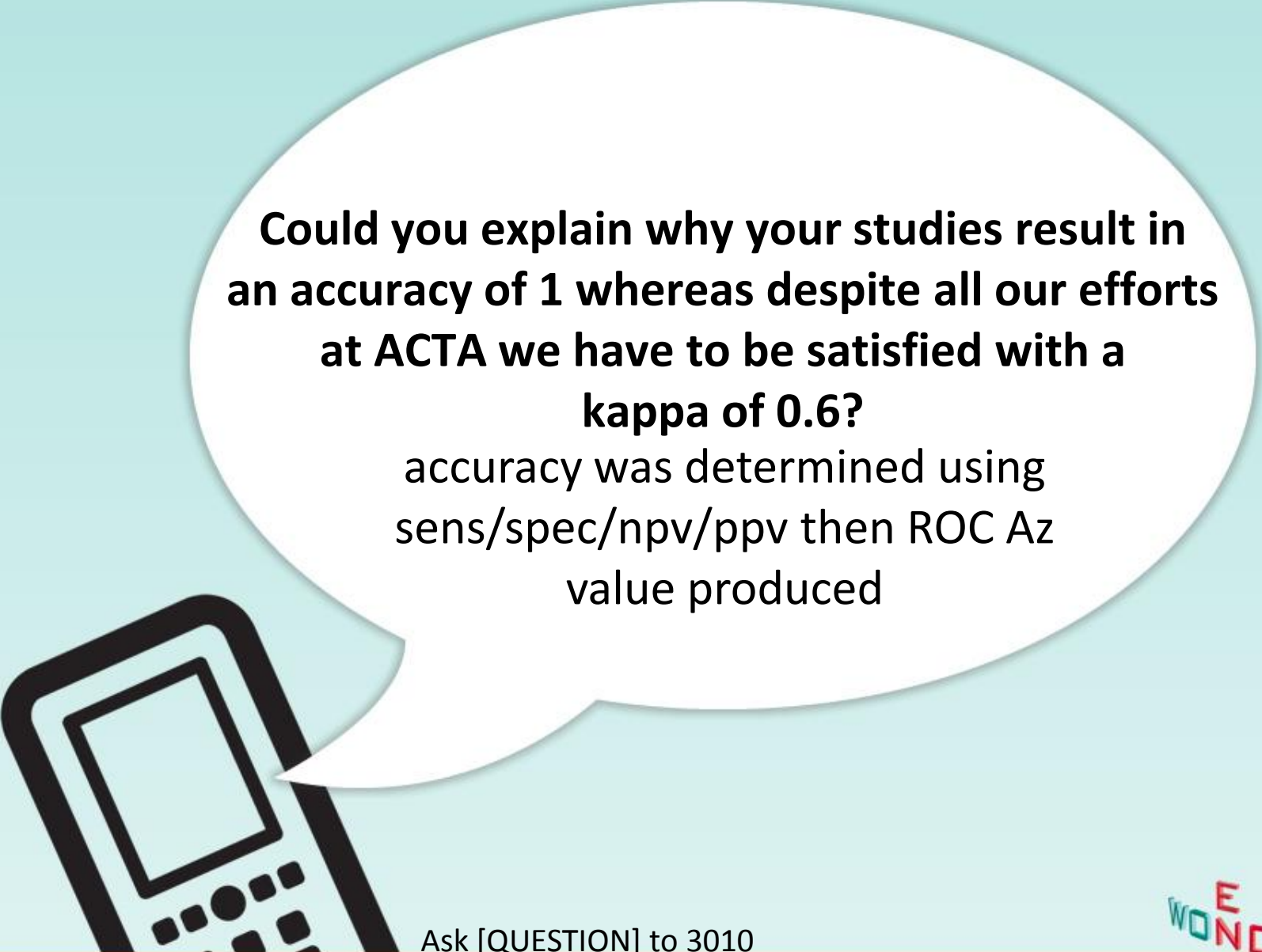
Ask [QUESTION] to 3010



**How do you justify yearly follow-up scans of clinically symptom-free patients?**

patients consented to participated in this clinical trial-ethical approval was gained to do so by ethics committee

Ask [QUESTION] to 3010



**Could you explain why your studies result in an accuracy of 1 whereas despite all our efforts at ACTA we have to be satisfied with a kappa of 0.6?**

accuracy was determined using sens/spec/npv/ppv then ROC Az value produced

Ask [QUESTION] to 3010

**Can you use this cone beam scanner also to  
make normal digital panoramic pictures?**

i have answered this



Ask [QUESTION] to 3010

**What do you suggest as criteria for healing on cbct? Comparable to neighbourtooth?**

wait until next presentation



Ask [QUESTION] to 3010

**Does evidence support the use of CBCT in endodontic treatment leading to less iatrogenic errors (ie. Perforations, zipping, ledges)?**

not enough data out yet.....but i think it will eventually

Ask [QUESTION] to 3010

**Why do you use normal pa radiograph to evaluate endresult or healing?**

wait until next presentation

Ask [QUESTION] to 3010

**In the casereport of the upper premolar.  
What kind of reporption was going on?**

external cervical resorption

Ask [QUESTION] to 3010

**Couldn't you distinguish a granuloma from a cyst with an echo doppler ultrasound scan?**

No you can't. This only can be done with hystology

Ask [QUESTION] to 3010