

Astra Tech Implants: Anyone Else Experience Flowering in the Top of the Implants?

April 4, 2012 · [7 comments](#)



in [advice](#), [Surgical Placement of Dental Implants](#)

I have been using Astra Tech implants quite successfully for some years now. Recently I have had several cases of Astra Tech implant fixtures experiencing a flowering [Editor's note: fracturing within the coronal aspect]. I have just seen my third case of this happening in their 4.5mm diameter implant. The case involved screw retained crowns that had been functioning without any problems for 3 years. Could this have been due to an occlusal overload? Or is this a problem in implant design or flexural strength? I discussed this problem with Astra Tech and they say that this has been a rare event. Have any of you experienced this problem with their implant system?

{ 7 comments... read them below or [add one](#) }



[Erik Lennartsson](#) April 4, 2012 at 1:48 pm

I know the story. You have a problem and the company say; never heard that before.... I have about 800 referrels per Year and I can tell You that I see 4-8 cases with Astra 4,5 or 3,5 fractured ever Year. Patients come to change Dr and implant type... I see this on cases where the bone is gone the first 3mm or more;
I do not place Astra since I Think the 4,5 is a wrong design. To wide at the crest leaves less Bone + not a tight seal+ way to thin walls!
I wish You good luck choosing a other implant brand.
// Erik

[Reply](#)



[Seth Rosen](#) April 5, 2012 at 4:21 pm

Unfortunately, I was the placing dentist. I did not see a great deal of failure with Astra overall. I was very satisfied with the product design and the prosthetic flexibility. That is until...three years post restoration on a few 4.5 implants. I have "repaired" a few of these cases by placing a uni-abutment and a new crown. This is not ideal since the uni-

abutment does not have any anti rotation built in. This last case just presented and I was starting to see a startling pattern for this product. Astra first stated that their implants rarely fracture and there is no design problem with the 4.5. They inquired as to torque values, I use their torque wrench set to 25 NCM. They claim that I must have over torqued and I caused the fracturing. Yet I used the same torque wrench on all of my other restorations 3.5-5.0 without a similar problem. Further to this end, I used the same torque wrench when restoring 3i, MIS, BioHorizon, Implant Direct, Zimmer, and now HiOssen with no restorative problems.

[Reply](#)



[Frank Niver](#) April 10, 2012 at 3:23 pm

I stopped using Astra a few years ago. Never had a fracture but had multiple Direct Abutments come loose after some years of function. Was told that we probably did not torque the abutment correctly but as others noted, we have had 1000's of Straumann and other implants that never had abutments come loose. The company never stood behind us for compensation for proper replacement which was very disappointing.

[Reply](#)



[Jerry Niznick](#) April 11, 2012 at 12:13 am

Fractures with Astra implants were predictable based on it's 79 or 81 degree lead-in bevel with pure titanium. The long bevel (vs a short 45 deg. Bevel of the Screw-Vent/Legacy internal hex implants) creates thin walls and tightening an abutment into the deep conical connection creates a wedging effect that splits the implant after the metal fatigues. A 45 degree lead-in bevel provided adequate tactile sense to guide the abutment to full seating without the need for radiographs, and provided the same lateral stability without compromising strength. This connection has a 26 year history and once we stopped using pure Ti. in 1990 and started offering 4.7mm and 5.7mm implants instead of just 3.7mm, fractures became a thing of the past. Today we can make 3.2mm implants without fear of fracture.

[Reply](#)



[Frank Niver](#) April 11, 2012 at 10:40 am

Would the high degree lead in bevel account for the frequent abutment loosening that we had? Fortunately, so far, we have not had a fracture.

[Reply](#)



Jerry Niznick [April 12, 2012 at 12:13 pm](#)

Frank...these comments from a former Astra Rep should give you the answer:

“Their 3.0 uses a 1.4mm abutment screw and they break somewhat easily. (Niznick Note: the smallest screw used by Implant Direct is 1.6mm and is Ti. Alloy) The larger problem is with 3.5 & 4.0, which have 1.6mm screws, they break more frequently. Astra blamed the Docs, for not torquing etc, yet they tried to correct the problem by making the screws out of alloyed Ti. (to increase strenght) This problem developed, around 2007, when they decreased the abutment screws from 2.0 to 1.6 to create a common internal diameter for 3.5 & 4.0 implants. (Some of their 1 piece, “Solid type”, abutments also broke so they alloyed them too)

4.5 & 5.0's use 2mm screws. The 4.5 is a conical coronal type implant and I do remember hearing about GP's that had the top of the implants crack and flower following restorations. (So the smart ones discontinued use) I think the walls were made too thin, as a by product of once again creating a common interchangeable connection for 4.5 & 5.0 implants.

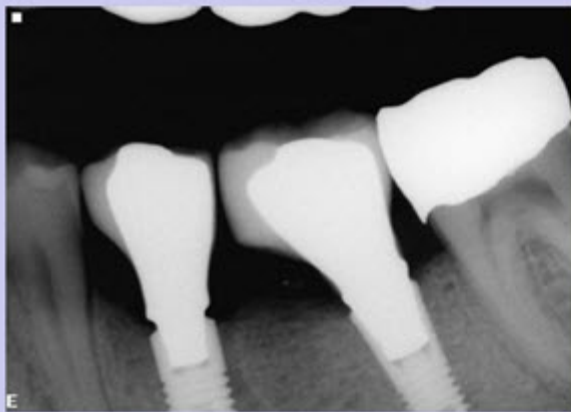
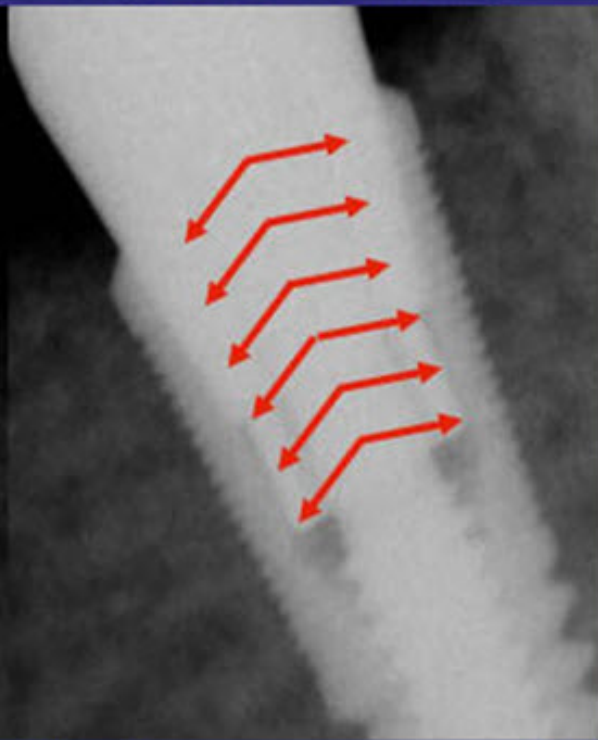
PICTURES OF FRACTURED ASTRA IMPLANTS... NOT POSTED ON BLOG

Fracture of Astra Implant. If Micro-threads had preserved bone, then there would be no lateral force 4mm below crest

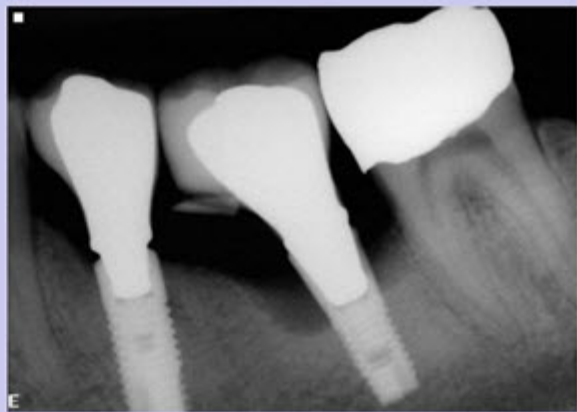


Astra Implants – Deep Conical Connection/Thin Walls 3/08

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March 2008



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