

1 **Salvador Gaytan:** Welcome to SmileTalk, an entertaining and informative dental
2 talk-show featuring the latest news and developments in dentistry.
3 I'm Salvador Gaytan and I'm here with...
4

5 **Dr. John Chao:** Dr. John Chao, hi everybody.
6

7 **Salvador Gaytan:** From Alhambra Dental. Dr. John is also known as the friendly
8 dentists. Normally, we get started with our Rapid Fire Five, but
9 today we have an incredible show, very, very fascinating and we're
10 joined in the studio with three students, 4th year students from USC
11 School of Dentistry and they have a fascinating study about -- in
12 fact I'm not even going to say what it is, the study is called, and
13 I'm going to go here to Matt. What is the study called?
14

15 **Matthew Caligiuri:** The title of our study is Oral Bisphosphonate Use and the
16 Prevalence of Osteonecrosis of the Jaw and Institutional Inquiry.
17

18 **Salvador Gaytan:** Excellent.
19

20 **Dr. John Chao:** Now, Sal, repeat that please.
21

22 **Salvador Gaytan:** I'm not going to repeat that, but we'll mention more what that
23 means, but I didn't want to go into that. But anyway, I'm here with
24 Kyle Stanley. How are you doing today, Kyle?
25

26 **Kyle Stanley:** I'm doing great, thanks for having us here.
27

28 **Salvador Gaytan:** And of course, here with Matt Caligiuri. How are you Matt?
29

30 **Matthew Caligiuri:** Hello, very good, thanks.
31

32 **Salvador Gaytan:** And Sean Hofkes.
33

34 **Shawn Hofkes:** I'm wonderful, thank you.
35

36 **Salvador Gaytan:** Did I pronounce your last name right?
37

38 **Shawn Hofkes:** You did. It's very German.
39

40 **Salvador Gaytan:** I did, okay, good. I want your other students to recognize who is
41 here. Okay, so, we've got these three fine upstanding young men
42 from the USC School of Dentistry, and it's an incredible study
43 about bone loss and one of the most popular drugs used, called
44 Fosamax and they're going to tell you what they've found and it's
45 incredible. They've influenced a new packaging requirement by
46 the FDA. So, Dr. John, take it away.

47
48 **Dr. John Chao:** Okay. Today we're going to talk about Osteoporosis and its side
49 effect, which is Jaw Bone Necrosis or Jaw Bone Death, that can
50 come about as a result of the taking of this drug. We're going to
51 talk about this particular aspect of it. I want to make it relevant by
52 giving you this information regarding osteoporosis. It is not a
53 minor disease.
54
55 Each year this bone disease counts for 1.5 million new fractures.
56 Of these fractures, 250,000 are head fractures, the resulting
57 mortality rate exceeding 20% in women and 30% in men.
58
59 Recurring hospitalizations, increased office visits and often the
60 need for care at extended treatment facilities in people who have
61 sustained hip fractures, less than 25% of them regained full
62 function.
63
64 So, we're talking about a drug that's very, very important to our
65 society to prevent this kind of mishaps and harm that comes to so
66 many people. So, today we're not talking about the lessened use of
67 this drug, right?
68
69 **Matthew Caligiuri:** Correct.
70
71 **Dr. John Chao:** We're talking about the use of this drug, but we're talking about
72 how we can control the side effects.
73
74 **Matthew Caligiuri:** Exactly.
75
76 **Dr. John Chao:** Of this drug. So, in what way would you say that this particular
77 condition, osteoporosis, has relevance to dentistry? Kyle, would
78 you answer that question for us?
79
80 **Kyle Stanley:** Yeah, so this is Kyle Stanley here, and there's over 10 million
81 Americans in the U.S. right now that have osteoporosis. A lot of
82 them being post menopausal women, and people in the 40 to 60
83 age range.
84
85 So, there's just a large amount of people. So, the people that are
86 coming into dental offices now -- the doctors and the patients seem
87 to have this conversation between each other. It's that everyone is
88 informed and knows what's going on, which drugs they're taking.
89
90 **Dr. John Chao:** In what way does this drug impact dental treatment?
91

92 **Kyle Stanley:** With the drug, there are a lot of surgical techniques and
93 preventative measures that can be taken to prevent this
94 Osteonecrosis that's happening, which is the bone death of the jaw.
95 So, a lot of it has to do with the dentist knowing what's going on,
96 and also the patient.
97

98 **Dr. John Chao:** Yeah, Kyle, we were talking about, let's say, a patient who's been
99 taking this particular drug in the form of Fosamax.
100

101 **Kyle Stanley:** Yeah.
102

103 **Dr. John Chao:** Right? And we're concerned that a patient who is on this drug for
104 quite some time, maybe in high doses, is more prone to have
105 certain problems as a result of dental surgery. We're talking about
106 that, right? So, in that way it relates to dentistry.
107

108 **Kyle Stanley:** Right.
109

110 **Dr. John Chao:** Yeah and so, Matt, would you tell us specifically what kind of
111 surgery can lead to this particular problem of Osteonecrosis of the
112 jaw, or death of the bone in the jaw?
113

114 **Matthew Caligiuri:** Right, I'd be happy to. So, basically as Kyle had mentioned just a
115 minute ago, the surgeries or the dental procedures that tend to be --
116 to have the highest risk for developing Osteonecrosis of the jaw,
117 are invasive procedures, things like dental extractions, invasive
118 perio surgeries.
119

120 **Dr. John Chao:** Now, what is perio surgery? I want you to explain that to us, Matt.
121

122 **Matthew Caligiuri:** So, in general terms, perio surgery involves cutting a portion of the
123 gum, exposing the bone underneath to remove really stuck-on
124 calculus deposits and things like that. Basically it's a risky
125 procedure for developing Osteonecrosis of the Jaw, because there
126 is so much exposure of the bone, and in that case more so than just
127 a normal cleaning, let's say, that you go for every six months.
128

129 And also, I just want to mention that dental implants is another
130 procedure that tends to be -- place patients at a higher risk for
131 developing Osteonecrosis of the Jaw, if they've been taking a
132 Bisphosphonate such as Fosamax.
133

134 **Salvador Gaytan:** Now, let me stop you right there, because I'm just listening as an
135 audience. Osteonecrosis of the Jaw refers to what specifically for
136 the audience?
137

138 **Matthew Caligiuri:** Simply put, bone death. Portion of the mandible, the jaw bone or
139 even the upper jaw bone dies and the body essentially starts to
140 reject that portion of the bone. None of the patients that were not
141 taking Bisphosphonate, developed any signs of Osteonecrosis.
142

143 **Salvador Gaytan:** When you say Bisphosphonates again, we're talking of drug, but
144 we're talking specifically about Fosamax, which is the most
145 popular drug.
146

147 **Matthew Caligiuri:** Right, the most commonly prescribed of these Bisphosphonate
148 drugs on the market right now.
149

150 **Dr. John Chao:** Sean, would you tell us what happens when there is Osteonecrosis
151 or jaw death in the jaw bone following a jaw surgery? What
152 happens to the patient or what symptoms do you get? How do you
153 know it's happening to your patient?
154

155 **Shawn Hofkes:** Right, right. Well, I mean, you can have different stages of
156 Osteonecrosis, and there's three different stages. I mean, you can
157 have exposed necrotic bone, that's actually asymptomatic, so...
158

159 **Dr. John Chao:** Necrotic bone, meaning bone is dying.
160

161 **Shawn Hofkes:** Bone death, right.
162

163 **Dr. John Chao:** Okay.
164

165 **Shawn Hofkes:** And stage two is exposed dead bone, that is associated with pain or
166 an infection. And stage three is actually where you have
167 Osteolytic, which means it's the breaking down of bone, associated
168 with bone death, infection or an open fistula, which is a fracture of
169 the bone.
170

171 These patients have come in, severe pain. They require removing
172 some of the bone, going on antibiotics and going on a rinse, called
173 the Chlorhexidine rinse.
174

175 **Dr. John Chao:** Yeah, so this is something we definitely want to avoid and if it
176 happens, there are ways to treat it, right?
177

178 **Shawn Hofkes:** Absolutely.
179

180 **Dr. John Chao:** Kyle, how -- in what way does your study impact on this problem?
181

182 **Kyle Stanley:** Well, previous reports by both the drug company and the
183 American Dental Association had said that there was a very low

184 chance of the patient having the side effect, and our study found a
185 much greater chance of the patient having this bone death.
186
187 **Salvador Gaytan:** Now, you're talking about the side-effects from Fosamax?
188
189 **Kyle Stanley:** From the drug Fosamax, yes.
190
191 **Dr. John Chao:** Okay, what was it alleged before in terms of the incidents of jaw
192 death as a result of dental surgery in the mouth, and what did you
193 discover as a result of your study?
194
195 **Kyle Stanley:** It was previously reported by the ADA Expert Panel, and that's the
196 American Dental Association Expert Panel, that the chance was
197 0.7 in 100,000 person-years and we found it to be 4%.
198
199 So, if you do the 0.7 in a 100,000, it's .0007. It's very low, so
200 everybody said, "Well, who cares if it's so low? We found it to be
201 4%, which is a lot higher of a chance for the patients to have this
202 side effect."
203
204 **Dr. John Chao:** So, one statistic says that one out of a hundred approximately can
205 have jaw bone death as a result of dental surgery. Your study
206 shows something that's much more alarming, because it's like four
207 out of a hundred.
208
209 **Kyle Stanley:** Well, they actually said, .7 out of 100,000, so that's way less.
210
211 **Dr. John Chao:** So, that's less than one -- less than one to 100,000.
212
213 **Salvador Gaytan:** That's way less.
214
215 **Shawn Hofkes:** Yeah, exactly.
216
217 **Dr. John Chao:** But you found that actually it's more like four out of 100.
218
219 **Kyle Stanley:** Correct.
220
221 **Dr. John Chao:** Now, how did you arrive at that conclusion, Matt?
222
223 **Matthew Caligiuri:** Basically what we did was we -- at our school, we have an
224 electronic record keeping system, and all the patients' care is
225 tracked on that, including what prescriptions they are taking, what
226 drugs they are taking and their detailed medical history.
227

228 Basically, what we did was, we took a look at our entire patient
229 population at the school at the time of the study, which was about
230 13,000 patients.
231
232 **Dr. John Chao:** 13,000 patients over what number of years.
233
234 **Matthew Caligiuri:** Actually, at that particular snapshot in time. So, at that particular
235 point in time, there were 13000 currently active patients.
236
237 **Dr. John Chao:** Wow, I didn't realize we were treating that many patients.
238
239 **Matthew Caligiuri:** Right, yeah, it's a large number. It's pretty...
240
241 **Salvador Gaytan:** This is at the USC...
242
243 **Dr. John Chao:** It's major, this is just USC alone, right?
244
245 **Matthew Caligiuri:** At the USC Dental Clinic, yes.
246
247 **Dr. John Chao:** So, at any moment, there are 13,000 patients being treated by our
248 wonderful staff of students.
249
250 **Kyle Stanley:** Go Trojans, huh?
251
252 **Dr. John Chao:** Yeah.
253
254 **Matthew Caligiuri:** Right on, right on.
255
256 **Dr. John Chao:** And helped along by instructors such as yours truly to get the
257 service done, right?
258
259 **Salvador Gaytan:** Dr. John, you said you're going to be equal opportunity, you will
260 invite some Bruins to be in the show.
261
262 **Dr. John Chao:** Yes, and our colleagues and students from Loma Linda.
263
264 **Salvador Gaytan:** Okay.
265
266 **Dr. John Chao:** So, this is -- the next show, we're going to concentrate on the
267 education you gentlemen get at USC, and then to other shows later
268 on, when we are going to talk to student doctors from UCLA and
269 from Loma Linda.
270
271 **Salvador Gaytan:** Fantastic. For anyone just tuning in, you're listening to SmileTalk.
272 I'm Salvador Gaytan, here with Dr. John Chao, the friendly

273 dentist; you can reach Dr. John at AlhambraDental.com or 626-
274 308-9104.

275
276 Right now, we have three great 4th year dental students from USC,
277 and they've compiled an incredible study and a finding about the
278 drug Fosamax and some of the side effects that people have. A lot
279 of people are taking this drug for osteoporosis.

280
281 So, now Shawn is another member here. Now, Shawn, what was
282 your input on the study and what did you find -- what would you
283 advise people?

284
285 **Shawn Hofkes:** We would advise people, if you're actually on the drug, to keep
286 your teeth healthy, floss, maintain your oral hygiene, brush your
287 teeth thoroughly with a soft tooth brush, because if you're actually
288 taking this drug -- I want to say as a caveat, that if you're taking
289 the drug, it's imperative that you don't stop taking the drug,
290 because you're hearing this new data, that's been revealed about
291 Osteonecrosis of the jaw, and possibly that as a side effect, because
292 you're taking the Fosamax.

293
294 So, yeah, don't stop taking the drug, but if you are taking the drug,
295 make sure that you're consulting not only with your physician, but
296 also with your dentist to coordinate your treatment in such a way
297 that you're going to get your extractions completed either a) before
298 you take Fosamax, or they can coordinate and treatment modify
299 your plan, that you can be taking the correct antibiotics, be taking
300 the correct rinses and basically having the correct protocol, so you
301 can prevent disease like this, Osteonecrosis of the Jaw, which is
302 dead bone.

303
304 **Dr. John Chao:** This study is relevant to patients who are on this drug, because if
305 they do have to have jaw surgery in terms of extracting teeth or
306 implants put in and having gum surgery, they should be aware of
307 this possible side effect.

308
309 Kyle, would you tell us what relevance this might have to any
310 patient who is taking this drug, what should they be doing with
311 their teeth? Should they take better care of their teeth? What would
312 be your suggestion for the patients?

313
314 **Kyle Stanley:** Yeah, like Shawn said, the biggest thing is take care of your teeth,
315 because we're seeing this disease happening after surgeries, such
316 as extractions or having a denture. So, when you have your teeth,
317 take care of them, so you don't have to get to that point where you
318 need these types of invasive surgeries.

319
320 **Dr. John Chao:** Yeah, so you could be instead of one out of 100,000 -- now, if
321 you're taking Fosamax, you could be one out of 20.
322
323 **Kyle Stanley:** Exactly.
324
325 **Dr. John Chao:** Four out of a hundred, that could have a major jaw infection as a
326 result of jaw surgery, so you want to avoid that.
327
328 **Salvador Gaytan:** So, Dr. John, what would be if someone is taking Fosamax, and
329 they have some extractions and they have some necrosis of the
330 jaw, what would be the difficulties for them? How would that
331 manifest itself?
332
333 **Dr. John Chao:** Well, you'll have a -- as Shawn had said, you'll have exposed bone
334 sometimes, that doesn't heal, and then you'll have different levels
335 of infection, and that will be needed to be attended to immediately.
336
337 And there are certain antibiotic therapy, that would need to be
338 instituted right away, to prevent a serious problem from
339 developing, because this could be major, right? It could lead to jaw
340 fractures and serious infection that can spread to the other parts of
341 the body.
342
343 So, now we've talked about how the patient should then really take
344 care of their mouth, particularly if you're on Fosamax. Would you
345 tell us, Shawn, what are the prevalence of this disease in the
346 population? What kind of people are on this drug?
347
348 **Shawn Hofkes:** Well, there's 10 million Americans, that we know of, that currently
349 suffer from Osteoporosis. Now this drug, Fosamax, is the 21st most
350 commonly prescribed drug out of all drugs that were prescribed in
351 2006. So, we know that there's a great deal of patients that are on
352 Fosamax.
353
354 **Dr. John Chao:** What age group are we talking about, generally speaking?
355
356 **Shawn Hofkes:** We're talking about post menopausal women over the age of 40,
357 50, 60, men, 40, 50, 60. These people are very susceptible and
358 prone to fracturing their bones, because of lack of bone density.
359
360 **Dr. John Chao:** So, is it more prevalent among women than men?
361
362
363 **Matthew Caligiuri:** It absolutely is more prevalent among women than men. It's
364 interesting actually -- we tend to see about a five year lag in

365 developing Osteopenia, which is kind of the precursor to
366 osteoporosis, and then osteoporosis in men versus women.
367
368 So, the average woman, let's just say, gets osteoporosis around the
369 age of 40, you could sort of infer that the average man then would
370 get it at about 45 or so, but it's definitely a concern for both sexes.
371
372 **Dr. John Chao:** Yeah, so this information, by the way, this information that we're
373 putting out to the public, this is based on scientific studies, right?
374
375 **Matthew Caligiuri:** Absolutely.
376
377 **Dr. John Chao:** This is not just...
378
379 **Salvador Gaytan:** Three guys.
380
381 **Matthew Caligiuri:** Not just three guys and some wild ideas, we like to make some
382 things up.
383
384 **Dr. John Chao:** Four guys.
385
386 **Salvador Gaytan:** Do we actually know they're USC students, Dr. John or they just
387 walked in?
388
389 **Matthew Caligiuri:** I have my badge.
390
391 **Kyle Stanley:** I've got my badge.
392
393 [Crosstalk]
394
395 **Dr. John Chao:** Now, this is based on serious study. Actually, I'm looking at
396 publications in front of me as I'm reading off these statistics,
397 because...
398
399 **Salvador Gaytan:** Well, now, Dr. John, tell them where their study was published.
400
401 **Dr. John Chao:** This was published, right fellows, in the most authoritative journal
402 of dentistry in America, the Journal of the American Dental
403 Association. You can't go higher than that, right? And it's now
404 true that in every dental library of the world, there will be copies of
405 the Journal of the American Dental Association.
406
407 **Matthew Caligiuri:** I'd like to think so.
408
409 **Dr. John Chao:** I'm pretty confident that no library, a respectable library will not
410 have the Journal of the American Dental Association.

411
412 **Salvador Gaytan:** And Sean, when was this published?
413
414 **Shawn Hofkes:** This was published January of 2009.
415
416 **Salvador Gaytan:** So, this year.
417
418 **Shawn Hofkes:** This year.
419
420 **Salvador Gaytan:** Yeah.
421
422 **Dr. John Chao:** Isn't it a fantastic phenomenal feather in your cap that your
423 research was published in such a prestigious magazine?
424
425 **Matthew Caligiuri:** Well, it's great to know that it hopefully will have a wider
426 distribution. It can get out to more dentists and really sort of spark
427 a conversation among more physicians and hopefully affect the
428 lives of more people.
429
430 **Dr. John Chao:** And this is exactly what we're doing, aren't we? We're going on
431 the air here and broadcasting this information to the general public
432 and hopefully that will stimulate more interest in this particular
433 matter.
434
435 **Salvador Gaytan:** And for anyone just tuning in, you're listening to SmileTalk.
436 You're listening with Dr. John, the friendly dentist and we have
437 three incredible students from the USC School of Dentistry.
438
439 **Dr. John Chao:** From the incredible School of Dentistry at USC.
440
441 **Salvador Gaytan:** At USC.
442
443 **Matthew Caligiuri:** I think we're going to change the name.
444
445 **Salvador Gaytan:** Why not? Change the name. We've got Kyle Stanley, Matt
446 Caligiuri and Shawn Hofkes. There's one other point I know you
447 wanted to get to, Dr. John, about how this study actually affected
448 the drug company Merck to change some packaging, isn't that
449 right?
450
451 **Dr. John Chao:** Yeah, to affect the packaging warnings on any drug takes a
452 phenomenal effort. There's been battles fought on different kinds
453 of drugs, the anti-inflammatory drugs is one of the major battles.
454

455 So, for this study to actually change the way the drug is labeled, is
456 a phenomenal, phenomenal development, isn't that right? One of
457 you can answer that.
458
459 **Matthew Caligiuri:** Yeah, well, I think it's -- it just shows that the federal government
460 is taking this seriously, as we think that everybody should be
461 taking this seriously. It's kind of giving us a, hey, take a look at
462 this. This is something that is not going away, it's a problem that's
463 been recognized as being bigger and bigger. We need to make sure
464 that the patients are informed, and doctors are informed,
465 pharmacists are informed.
466
467 **Dr. John Chao:** Yeah, so the federal government, in the form of the FDA, has said
468 this drug's label should be changed, because of this new
469 information that says that there is more bone death as a result of
470 jaw surgery, so therefore you should change the label. What does
471 the label say now?
472
473 **Kyle Stanley:** Well, basically it's acknowledging the fact this complication is of a
474 much higher potential...
475
476 **Matthew Caligiuri:** Frequency?
477
478 **Kyle Stanley:** Exactly, frequency, thank you than was previously thought, so that
479 it can no longer be sort of brushed under the rug as insignificant.
480
481 **Dr. John Chao:** Yeah.
482
483 **Salvador Gaytan:** Now, were you guys surprised that the FDA actually took your
484 paper and actually did something with it?
485
486 [Crosstalk]
487
488 **Matthew Caligiuri:** Yeah, this. I think a little bit, I mean it kind of hits you.
489
490 **Kyle Stanley:** We've been working on this research for about two and a half
491 years before it got published. So, it was really cool to see the
492 reaction that we got, a lot of -- not only our colleagues, even just
493 other students.
494
495 Faculty around USC are asking us for advice. I mean my dad, who
496 is a dentist, will call me and ask for advice if he has a Fosamax
497 patient. They talked about our paper in newspapers and on the
498 news, in the U.K. so, it's...
499
500 **Salvador Gaytan:** Now, your heads are getting big, are they? [Crosstalk]

501
502 **Kyle Stanley:** Yeah, it's really great that it's being able to reach that many
503 people.
504
505 **Shawn Hofkes:** I want to give a shout out to Dr. Parish, who was our principal
506 investigator.
507
508 **Matthew Caligiuri:** Absolutely.
509
510 **Dr. John Chao:** I was just going to ask how this study was done? You worked
511 under Dr. Parish.
512
513 **Shawn Hofkes:** Dr. Parish.
514
515 **Dr. John Chao:** Would you tell us who he is and what he does at USC Dental
516 School? We all know, but I want you to describe that.
517
518 **Shawn Hofkes:** He graduated, he has his DDS from USC School of Dentistry, he
519 went onto Ohio State University to get his specialty board certified
520 license as an Oral Maxillofacial Pathologist, and he's been faculty
521 at USC for how many years, guys?
522
523 **Matthew Caligiuri:** Oh, man, it's a good question, yeah at least five. He's now the
524 head of the Oral Biofilm Department at USC.
525
526 **Shawn Hofkes:** But he was very instrumental in us piecing this paper together.
527
528 **Dr. John Chao:** So, he's called the principal investigator.
529
530 **Matthew Caligiuri:** Right, the PI as we like to throw around.
531
532 **Dr. John Chao:** Not private...
533
534 **Matthew Caligiuri:** Not private investigator, no, principal investigator.
535
536 **Dr. John Chao:** Not Magnum or whatever.
537
538 **Shawn Hofkes:** Not Sherlock Holmes.
539
540 **Dr. John Chao:** And so, he and -- are there other professors also involved in this?
541
542 **Matthew Caligiuri:** Dr. Charles Shuler, who is now up at the university in British
543 Columbia. He sort of oversaw everything and he was a great
544 reviewer, had lots of great input and really working with those
545 professors and...
546

547 **Kyle Stanley:** He's the mentor, he's the dean.
548
549 **Matthew Caligiuri:** Yeah, he's the dean up in Canada, at British Columbia right now.
550
551 **Dr. John Chao:** So, he taught here at USC, and then he was invited to become the
552 Dean in a school in Canada. So, that's a wonderful development
553 for him.
554
555 **Matthew Caligiuri:** Absolutely, and it was great to be able to keep in touch with him. It
556 really was a humbling experience just being able to work with
557 these great professors and these great minds in the field, and kind
558 of just getting a different taste of research and a new appreciation
559 for it, I think, so it was a great experience.
560
561 **Salvador Gaytan:** Well, guys, we're coming to the conclusion of this segment and
562 maybe we'll have you guys stay over for a little bit of the next
563 segment. But, anyway the moral of the story is, what?
564
565 **Kyle Stanley:** Take care of your teeth, you're going to need them.
566
567 **Dr. John Chao:** That's right.
568
569 **Kyle Stanley:** Does that work, how's that?
570
571 **Salvador Gaytan:** But if you're using Fosamax, you need to be aware of
572 complications potentially with extractions and so forth.
573
574 **Dr. John Chao:** So, therefore keep your teeth healthy.
575
576 **Salvador Gaytan:** Keep your teeth healthy.
577
578 **Dr. John Chao:** See your dentist regularly.
579
580 **Kyle Stanley:** Get regular cleanings.
581
582 **Dr. John Chao:** Regular cleanings, if you're one of the 13,000 going to USC, be
583 sure to go regularly.
584
585 **Salvador Gaytan:** That's right.
586
587 **Dr. John Chao:** Take care of your teeth, right? See your dentist regularly, and so
588 you don't ever have to face the risk of having jaw infection
589 problems as a result of dental surgery.
590

591 **Salvador Gaytan:** So, basically, if people are taking Fosamax, they are only at
592 increased risk if they don't take care of their teeth, but if they take
593 care of their teeth and they don't need extractions.
594
595 **Matthew Caligiuri:** If they don't need extractions, yeah, they're not really at a risk.
596
597 [Crosstalk]
598
599 **Matthew Caligiuri:** At least as far as we've seen in the labs.
600
601 **Kyle Stanley:** Yeah, as far as we've seen, the risk comes when bone is exposed,
602 usually through surgery or dentures.
603
604 **Salvador Gaytan:** Excellent, well, Dr. John, what do you think of today's show with
605 your Trojans, huh?
606
607 **Dr. John Chao:** Great, we're going to have -- the next show we're going to
608 interview these three gentlemen. We're going to talk about how
609 USC educates and produces new doctors. It's really exciting.
610
611 **Salvador Gaytan:** I think you're going to get the Bruins juiced up here. They're
612 getting two segments.
613
614 **Matthew Caligiuri:** Bring it on.
615
616 **Dr. John Chao:** And we'll give Bruins a fair chance, because they are a great
617 school.
618
619 **Salvador Gaytan:** Great school, absolutely.
620
621 **Dr. John Chao:** Wonderful to talk about, as far as the Bruins are concerned, and
622 certainly Loma Linda is very highly respected in Southern
623 California and throughout the whole world. So, we'll look forward
624 to those students coming also.
625
626 **Salvador Gaytan:** Fantastic. You've been listening to SmileTalk with Dr. John, the
627 friendly dentist and three students from USC School of Dentistry,
628 Kyle Stanley, Matt Caligiuri and Shawn Hofkes and we'll see you
629 next week.
630
631 **Dr. John Chao:** Good bye, everybody.
632
633 [END OF AUDIO]