

1 **Salvador Gaytan:** Welcome to SmileTalk, an entertaining and informative dental talk  
2 show featuring the latest news in developments in dentistry. I'm  
3 Salvador Gaytan.  
4  
5 **Dr. John Chao:** And I'm Dr. John Chao from Alhambra Dental.  
6  
7 **Salvador Gaytan:** We have an excellent show today, Dr. John. How are you doing  
8 today?  
9  
10 **Dr. John Chao:** Fine, fine, I'm doing great. Hi everybody.  
11  
12 **Salvador Gaytan:** We're going to start the Rapid Fire Five here pretty soon, and  
13 we're going to talk about a subject that is very -- a lot of people  
14 suffer from, it's called TMJ and what does TMJ stand for?  
15  
16 **Dr. John Chao:** TMJ stands for Temporomandibular Joint, but it's also  
17 synonymous with a group of symptoms that includes headaches,  
18 dizziness, neck pains, that dentists actually treat. So, this is good  
19 news if you've got a headache that doesn't go away and nobody  
20 knows how to treat it. Your Court of Last Resort is dentistry.  
21 Dentists probably can help you with this.  
22  
23 **Salvador Gaytan:** Excellent, excellent. So, we'll get to that a little later, but let's get  
24 popping with our Rapid Fire Five. Are you ready Dr. John? I'm  
25 going to ask you five questions, true or false, and you're going to  
26 give the answer, and then we'll come back to the details. Are you  
27 ready?  
28  
29 **Dr. John Chao:** Yes, fire away, Sal.  
30  
31 **Salvador Gaytan:** All right, here we go. Question number one: The number one  
32 complaint regarding in-office teeth whitening is that teeth don't get  
33 white enough, true or false?  
34  
35 **Dr. John Chao:** That's false.  
36  
37 **Salvador Gaytan:** False, okay. Question number two: One recent scientific study  
38 indicates that denture adhesives, such as glue, when used in excess  
39 can cause brain damage, true or false?  
40  
41 **Dr. John Chao:** That's actually true.  
42  
43 **Salvador Gaytan:** Actually true, that's interesting. Okay, question number three: You  
44 can get a complete smile makeover with drilling or Novocain, true  
45 or false?  
46

47

48 **Dr. John Chao:** True.

49

50 **Salvador Gaytan:** True. Okay, question number four: Just like MRI or CAT Scans,  
51 some dentists use 3D X-rays to diagnose dental conditions, true or  
52 false?

53

54 **Dr. John Chao:** True.

55

56 **Salvador Gaytan:** True, another true, okay. Last question of the Rapid Fire Five,  
57 number five: Drowsiness from sleep apnea is the number one cause  
58 of motor vehicle accidents, and dentists can help treat sleep apnea,  
59 true or false?

60

61 **Dr. John Chao:** Yes, it is true.

62

63 **Salvador Gaytan:** It is true, well that's interesting, okay. Okay, Dr. John, let's get to  
64 question number one: The number one complaint regarding in-  
65 office teeth whitening is that teeth don't get white enough and that  
66 was false. Why is that false?

67

68 **Dr. John Chao:** Well, you would think that patients would complain that their teeth  
69 are not white enough. Actually, that's not a problem, teeth  
70 predictably can be whitened dramatically just by in all cases, the  
71 main problem that may occur when whitening is done in the office  
72 environment, is that the solution may be too strong or the teeth  
73 may be too sensitive, and the patients actually feel sensitivity or  
74 discomfort or actually pain from the teeth after the solution is put  
75 on the teeth for a while.

76

77 That's something that's very common. A lot of times it's mild  
78 enough to where the patients can basically tolerate it for the  
79 amount of time they have to be in the chair, but sometimes they  
80 just have to stop, because their teeth are sensitive.

81

82 So, as a prelude to getting teeth whitening sometimes, we'll apply  
83 certain solutions like fluoride to the teeth to minimize the  
84 sensitivity. But if there's going to be a problem with teeth  
85 whitening, it's generally coming from sensitive teeth.

86

87 **Salvador Gaytan:** Now, do you have a -- when someone comes in and says, "I want  
88 to have my teeth whitened", do you show them a chart?

89

90 **Dr. John Chao:** Oh, yes, you're referring to a shade tab that has a range of light to  
91 dark colors.

92

93 **Salvador Gaytan:** Yes.  
94  
95 **Dr. John Chao:** Shade tab is used to calibrate the shade or color of the teeth before  
96 whitening, and then after whitening, then the teeth are matched  
97 again to the same shade guide to see how much lighter the teeth  
98 have become. So, depending on how dramatic it is, it could be five  
99 shades whiter or maybe six-seven-eight shades whiter.  
100  
101 **Salvador Gaytan:** How many shades are on the shade guide?  
102  
103 **Dr. John Chao:** I would say -- I haven't counted lately, but it's about -- I will say  
104 about 12 shades on there.  
105  
106 **Salvador Gaytan:** 12 shades and this -- so does someone look at the brightest shade  
107 some time and says: "I want it brighter, Dr. John."  
108  
109 **Dr. John Chao:** Well, we'd like to have it really bright, but can't promise that  
110 you'll be more than five or six shades lighter, but it's dramatic  
111 enough to where the patients are generally very, very happy when  
112 they have it done.  
113  
114 It could be a lot lighter. If they really want it Hollywood white,  
115 really, really bright and white, they can actually do it at home, in  
116 addition to having their teeth whitened at the office. What we do is  
117 we make a tray or a mouthpiece, they can use that to apply more  
118 bleaching gel at home.  
119  
120 **Salvador Gaytan:** So, if someone comes in and has the whitening done in the office,  
121 how long will that usually last?  
122  
123 **Dr. John Chao:** That could last six months to a year, depending on what they do  
124 with their teeth. If you drink a lot of coffee, you like tea, like I do,  
125 it tends to lose the whitening effect. So, if you're careful, you'll  
126 stay away from food coloring of coffee and tea and chocolate and  
127 things like that, it could remain white for a long time.  
128  
129 **Salvador Gaytan:** So, a good supplement would be to have the home whitening in  
130 addition?  
131  
132 **Dr. John Chao:** Yes, yes and certainly, you can have whitening mouthwashes, you  
133 can have toothpaste which whitens teeth. So, you can have a whole  
134 bunch of things, that can help keep your teeth white in between  
135 visits.  
136

137 **Salvador Gaytan:** Okay, let's go to question number two: One recent study indicates  
138 that denture adhesives, which are made of glue, when used in  
139 excess can cause brain damage. That is true. Why is that true?  
140

141 **Dr. John Chao:** Well, surprisingly it's true. Just to back up a little bit, glue used to  
142 hold dentures up can be used on a temporary basis for certain  
143 special occasions, but if a patient has to use it long term, generally  
144 it means that there's something wrong with the fit.  
145

146 The dentures haven't changed, but the gums have shrunk and  
147 bone underneath the denture does shrink over time anyway. So, if  
148 we have an ill fitting denture and you try to hold it up with glue or  
149 denture adhesive, then what happens is that it actually puts an even  
150 pressure on the gums and bone, and gums and bone shrink even  
151 more.  
152

153 So, over time you have to use more and more glue, and this glue or  
154 denture adhesive contains zinc, and zinc when ingested tends to  
155 take away copper from the bloodstream. And if you have less than  
156 normal copper, it can influence the functioning of the brain and the  
157 impacts on central nervous system.  
158

159 So, this was reported in a well respected journal called Neurology  
160 last year, where they studied four patients, who had neurological  
161 problems.  
162

163 They couldn't sit, they couldn't move, their hands shake and their  
164 arms shake, they were really in a bad, bad shape as far as their  
165 ability to move around. This study discovered that the common  
166 denominator among them was that they were all using tremendous  
167 amount of denture glue.  
168

169 **Salvador Gaytan:** Because they wanted to keep those choppers in there, right?  
170

171 **Dr. John Chao:** So, it doesn't move around and this is -- in my practice it's not  
172 uncommon.  
173

174 **Salvador Gaytan:** Now, how does someone know if they're using too much adhesive  
175 for the dentures?  
176

177 **Dr. John Chao:** That's a very good question, Sal. The normal amount should not be  
178 more than one tube every three weeks. These people that were in  
179 the study were using denture glue, a tube every three or four days.  
180

181 Over a period of time, that creates definitely some problems. So,  
182 these are the dramatic cases as to what degree excessive denture

183 adhesive can cause a health problem, nobody really knows at this  
184 point of time.  
185  
186 **Salvador Gaytan:** Now, one way to avoid that is if someone can afford it, of course,  
187 is to have implants.  
188  
189 **Dr. John Chao:** Is to have implants, but at least if it doesn't fit well, see your  
190 dentist and have a reline done. It's not really expensive, you don't  
191 have to change your denture, it just changes the fit.  
192  
193 It's probably a good idea to have your dentist see your dentures  
194 and check them for a fit every year or so, and also, incidentally  
195 check for possible tumors and so on, that can occur underneath the  
196 denture.  
197  
198 So, but anyway the story goes that if you deplete copper, then  
199 neurological problems can start. The sad news is that once they  
200 stop using so much denture glue and they took copper  
201 supplements, the symptoms mostly remained.  
202  
203 There was some slight improvement in a couple of the patients, but  
204 the other patients remained debilitated as a result of the copper  
205 depletion.  
206  
207 So, that's kind of a caution to patients using denture adhesives that  
208 they need to see the dentist and get the problem corrected, and not  
209 depend on these artificial glues and denture adhesives and so on to  
210 make their denture stay up.  
211  
212 **Salvador Gaytan:** Excellent, maybe we can get to talk more about that in the future  
213 show but...  
214  
215 **Dr. John Chao:** Yes, definitely we should redo that over again and bring up what  
216 mini implants can do for denture wearers.  
217  
218 **Salvador Gaytan:** Excellent and for anyone just tuning in, I'm Salvador Gaytan.  
219 You're listening to SmileTalk, here with Dr. John Chao, the  
220 friendly dentist from Alhambra Dental. You can contact Dr. John  
221 at [AlhambraDental.com](http://AlhambraDental.com) or 626-308-9104, and your questions are  
222 welcomed to be submitted, we'll answer them on future shows.  
223  
224 **Dr. John Chao:** Yes, it's really easy, just go there and press the button on  
225 SmileTalk and leave your comments and questions. We'll love to  
226 hear from you.  
227

228 **Salvador Gaytan:** Okay, Dr. John, let's get to number three, question number three of  
229 the Rapid Fire Five. You can get a complete smile makeover with  
230 drilling or Novocain, that's true.  
231

232 **Dr. John Chao:** Yes, there are actually two kinds of procedures available on the  
233 market. One is the what's called Lumineers. You make these  
234 veneers, that would be glued onto the teeth, there's minimum  
235 amount of cutting with this particular technology, it's excellent. It  
236 is also quite expensive, but the advantage with Lumineers is that  
237 you don't have to cut the teeth.  
238

239 **Salvador Gaytan:** And you look great.  
240

241 **Dr. John Chao:** You look great and it's glued on, and it's very, very nice. The other  
242 kind which is a little bit newer, it's been around for about maybe  
243 three years and what it is, it's a snap on kind of a veneer.  
244  
245 It's a removable veneer, and you have -- you've got a roll of them,  
246 six or eight, that snap on and when they're snapped on there, you  
247 can hardly tell it's artificial.  
248

249 **Salvador Gaytan:** Now, you were talking to me about that the other week, and that is  
250 something new and we're probably going to have to do a show on  
251 that as well.  
252

253 **Dr. John Chao:** Yeah, that will be a very interesting show. This technology is  
254 invented by a dentist, and it's called Snap-on Smile.  
255

256 **Salvador Gaytan:** Yes.  
257

258 **Dr. John Chao:** So, you can have any kind of smile you want, provided you're kind  
259 of a natural candidate for that. If your teeth are really protruded,  
260 it's not a good idea, but if your teeth are in normal alignment or  
261 even tucked in, this will be a great, great device, and it costs  
262 generally the cost of one veneer.  
263

264 **Salvador Gaytan:** One veneer.  
265

266 **Dr. John Chao:** But you get the whole smile made over, so it's an excellent,  
267 interesting way to go.  
268

269 **Salvador Gaytan:** Well, that's fantastic. Now, but part of this was, people can get a  
270 whole -- an entire smile makeover sometimes without drilling, just  
271 using Novocain.  
272

273 **Dr. John Chao:** Well, you would need to use Novocain if you don't drill. So, with  
274 this method, with the Snap-on Smile method, you're basically  
275 taking an impression of the teeth and then the veneers are made  
276 from that, so there's no drilling, nothing.  
277

278 **Salvador Gaytan:** No needles, no drilling, nothing.  
279

280 **Dr. John Chao:** Yeah, you just take an impression and two weeks later you'll have  
281 your smile totally made over.  
282

283 **Salvador Gaytan:** Yes, we definitely need to do a show about that, because that is  
284 incredible, what can be done with that. Now, let's go to question  
285 number four, though: Just like MRI or CAT Scans, some dentists  
286 use 3D X-rays to diagnose dental conditions, and that is true.  
287

288 **Dr. John Chao:** Yes it is true. It's very exciting. Up until recent years, dentistry  
289 used 2D X-rays. These are the ones you see normally, it's on film,  
290 the last few years it's been on digital. We can take it without doing  
291 film, and we can put it on the monitor, enlarge it and do different  
292 things with it, but it's still 2D. Now, dentists...  
293

294 **Salvador Gaytan:** What is 2D? It's just like a basic picture?  
295

296 **Dr. John Chao:** Yes, it's flat.  
297

298 **Salvador Gaytan:** It's flat.  
299

300 **Dr. John Chao:** Just like taking photo and put it on the film, you cannot see  
301 sideways.  
302

303 **Salvador Gaytan:** Sideways or behind.  
304

305 **Dr. John Chao:** Behind, you cannot see the tooth in its real dimension. It's kind of  
306 a flat representation of the tooth. I said representation, because  
307 there are distortions in it depending on the angle you took it at. So,  
308 then we've learned, of course, to interpret those 2D X-rays and get  
309 an idea, a pretty good idea of what the tooth actually looks like.  
310

311 **Salvador Gaytan:** So, just to clarify, 3D, you can see from every angle?  
312

313 **Dr. John Chao:** Yes, you can actually walkthrough the tooth.  
314

315 **Salvador Gaytan:** Wow.  
316

317 **Dr. John Chao:** From any angle that you want. It's like having an MRI taken of  
318 any part of your body. The doctor can basically go through every

319 bit of the MRI image and see from different directions and then  
320 find anything that could be wrong.  
321  
322 **Salvador Gaytan:** Now, what's the advantage for the patient -- of you having 3D X-  
323 ray to diagnose problems?  
324  
325 **Dr. John Chao:** Oh, I mean we can do one show on that. That's just tremendously  
326 helpful, because now, for instance, we know more accurately  
327 where the decay is. We know more accurately, from different  
328 angles, where the nerve is.  
329  
330 Now, we know how the root is curved, if we have to do a root  
331 canal, or we have to extract the tooth, now we know exactly the  
332 dimensions of the bone, of the teeth, of the nerves and so on, and  
333 we can measure it up to one tenth of a millimeter.  
334  
335 **Salvador Gaytan:** So, this makes it more effective and less painful for the patient.  
336  
337 **Dr. John Chao:** Yes, and more -- and the treatment a lot more predictable.  
338 Misdiagnosis is so much more accurate. We can be a lot more  
339 predictive as to the success of treatment. So, it's a wonderful tool.  
340  
341 **Salvador Gaytan:** Now, you have 3D x-ray in your office?  
342  
343 **Dr. John Chao:** Yes, I happen to have that also.  
344  
345 **Salvador Gaytan:** Do all dentists have 3D x-rays?  
346  
347 **Dr. John Chao:** No, just a few of us who are more involved in implants. If you do a  
348 lot of implants, you need to have that rather than send your patient  
349 out to the laboratory. So, when you do a lot of implants, then  
350 you're motivated eventually to get a 3D x-ray put in your office.  
351  
352 We do implants with it, but we also use it on everyday basis to  
353 diagnose dental conditions. Now, by the way, 3D x-rays, CAT scan  
354 in the dental office is 180 times less in terms of exposure to the  
355 patient compared to the medical CAT scans that you get at the  
356 hospital.  
357  
358 **Salvador Gaytan:** You're talking about the radiation that the patient is exposed to?  
359  
360 **Dr. John Chao:** Yes. It's just like getting three or four of those little tiny films in  
361 terms of the radiation, so this is excellent, excellent minimally  
362 invasive type of a diagnostic procedure.  
363



364 **Salvador Gaytan:** That's fantastic. And we'll talk more about that on a future show  
365 too, so many topics here, but let's get to question number five on  
366 the Rapid Fire: Drowsiness from sleep apnea is the number one  
367 cause of motor vehicle accidents and dentists can help treat sleep  
368 apnea. That is true and there's quite a bit of information, you have  
369 to tell us about that.  
370

371 **Dr. John Chao:** Yes, it is actually true. Let me tell you about a report published last  
372 year by the Institute of Medicine. It says that 50 to 70 million  
373 Americans suffer from chronic sleep disorders, so they get drowsy  
374 as a result of this disorder, and that composes about 4% to 7% of  
375 the population.  
376  
377 Drowsiness, the name for that is Hypersomnolence costs \$150  
378 billion a year in lost productivity, and another \$48 billion in  
379 medical costs, that involve drowsy drivers. 20% of all serious car  
380 crashes are associated with daytime drowsiness.  
381  
382 Now, how dentists can help is that we can screen for sleep apnea.  
383 There are certain signs and symptoms of sleep apnea that we can  
384 observe in our patients.  
385

386 **Salvador Gaytan:** Now, for the listeners, let's define what sleep apnea is, because  
387 we've gone over this, but just sleep apnea is in short what?  
388

389 **Dr. John Chao:** In short, in common terms it's the stoppage of breathing during  
390 sleep for periods longer than 10 seconds. And if you have episodes  
391 of more than 10 times per hour, then that crosses into the threshold  
392 of obstructive sleep apnea.  
393  
394 Now, patients sometimes can have 20, 30 episodes per hour, and  
395 they even have up to 30, 40, 50, 60 or more instance of that kind  
396 per hour. So, you can see how if you're deprived of sleep in that  
397 manner, that you can get very drowsy during the day.  
398

399 **Salvador Gaytan:** So, in other words, people, they might supposedly be in their bed  
400 for seven to eight hours, but they are not getting sound sleep due to  
401 the sleep apnea, and therefore they can become drowsy when  
402 driving and that causes the problems.  
403

404 **Dr. John Chao:** Yeah, it's like somebody sitting on your chest and choking you 20,  
405 30, 40 times per hour for 10 seconds, 20 seconds or 30 seconds or  
406 more.  
407  
408 Even though you're sleeping, but you're really waking up, and if  
409 you don't get to deep sleep, what's called REM sleep, then you're

410 not going to get the rest that your body needs and during the  
411 daytime you're going to get drowsy, and you're going to fall asleep  
412 doing different things and it becomes very dangerous, and you're  
413 falling asleep over the driver's steering wheel.  
414  
415 **Salvador Gaytan:** So, now, did you just say 20% of all accidents are from...  
416  
417 **Dr. John Chao:** 20% of serious car crashes are associated with daytime drowsiness,  
418 so it's a tragedy that's not being recognized, and it should be more  
419 publicized.  
420  
421 It can improve the quality of people's lives, and save a lot of lives  
422 if they do have sleep apnea. So, dentists are involved in screening  
423 this for this disease and referring them to the medical community  
424 for treatment.  
425  
426 **Salvador Gaytan:** So, if someone suspects they might have sleep apnea, and they're  
427 seeing their dentist regularly, probably a good idea to ask their  
428 dentist for an evaluation and see if they can do anything for them,  
429 right?  
430  
431 **Dr. John Chao:** Yeah. So, there are two -- since you asked, there are two main  
432 symptoms of sleep apnea, and you know whether you have it or  
433 not. Number one is you're known to snore, heavily, frequently  
434 when you're sleeping and continuously over a long period of time,  
435 not just occasionally.  
436  
437 **Salvador Gaytan:** Now, you don't snore Dr. John, do you?  
438  
439 **Dr. John Chao:** Yes, I do.  
440  
441 **Salvador Gaytan:** Dr. John, come on now.  
442  
443 **Dr. John Chao:** Yes, I do and I have a little -- I have an appliance for me.  
444  
445 **Salvador Gaytan:** Really?  
446  
447 **Dr. John Chao:** I tend to have mild sleep apnea, and I have an appliance and it  
448 really works well for me. I've been known to snore since I was  
449 young, so I took it seriously when I became a dentist.  
450  
451 Now, the other symptom of sleep apnea is daytime tiredness, day  
452 time drowsiness. If you've got the two, then you should definitely  
453 ask your physician, of course you can certainly ask the dentist as to  
454 what to do with it.  
455

456 There are other signs and symptoms. One of them would be  
457 Gastroesophageal reflux, because when you're trying to struggle to  
458 breath during sleep, it kind of pumps up things from your stomach.

459  
460 That's a common symptom also, and there are a bunch of other  
461 symptoms that the dentists can look at. If you have a real thick  
462 neck, like 17, 18 or bigger than that, then the chances are you are  
463 likely to have a bigger problem.

464  
465 **Salvador Gaytan:** So, why is a thicker neck might increase your chances of  
466 experiencing sleep apnea?

467  
468 **Dr. John Chao:** Well, sleep apnea actually is the collapse of the airway in the back  
469 of the throat in the area between the tongue and the back of the  
470 throat.

471  
472 So, when you're sleeping, if your neck is big and the airway is  
473 narrowed because of the thickness of the neck, then it can collapse  
474 easier. It's more collapsible. Then you end up having your airway  
475 obstructed once you go into deep sleep and your muscles relax and  
476 everything collapses on you. It's like a reed, it collapses.

477  
478 So, thick neck is a definite sign of possible sleep apnea and some  
479 other symptoms, but the dentists can check for that. So, if you are a  
480 listener with this kind of problem, be sure you check you're your  
481 physician, because sleep apnea can lead to other major problems  
482 like high blood pressure, strokes, diabetes, arthritis, a whole bunch  
483 of stuff.

484  
485 **Salvador Gaytan:** So, in other words, it's very important for people to get their sleep,  
486 that's the bottom line.

487  
488 **Dr. John Chao:** Yeah, and be able to sleep well when you're asleep.

489  
490 **Salvador Gaytan:** Well, interesting. Okay, that concludes our Rapid Fire Five. For  
491 anyone tuning in, you're listening to SmileTalk with Dr. John, the  
492 friendly dentist from Alhambra Dental.

493  
494 **Dr. John Chao:** Now, now, Sal, I have to interrupt.

495  
496 **Salvador Gaytan:** Yes.

497  
498 **Dr. John Chao:** How do dentists help with this problem? We help screen for the  
499 problem, we will send the patient to the physician for definitive  
500 diagnosis, but how do we help?

501

502 We can help by making appliances that can open up the airway  
503 more. There are some appliances that can move the lower jaw  
504 forward and therefore create more room in the back, and there are  
505 newer appliances that can actually move the tongue forward, push  
506 it forward.  
507  
508 **Salvador Gaytan:** What would an appliance look like?  
509  
510 **Dr. John Chao:** It's like a mouthpiece.  
511  
512 **Salvador Gaytan:** Mouthpiece.  
513  
514 **Dr. John Chao:** It's like a mouthpiece with different constructions, different  
515 designs. There's a whole bunch of designs out there depending on  
516 what the patient's situation is, and then the dentist can prescribe  
517 the appropriate appliance, but there's a new one out, it's called Full  
518 Breath, it's really exciting. You put in on your lower teeth, it  
519 pushes the tongue forward. It's really easy to wear.  
520  
521 **Salvador Gaytan:** What's this called again?  
522  
523 **Dr. John Chao:** It's called Full Breath.  
524  
525 **Salvador Gaytan:** Full Breath?  
526  
527 **Dr. John Chao:** It's actually invented by a classmate of mine by the name of Dr.  
528 Keropian.  
529  
530 **Salvador Gaytan:** I see. How long has that been around?  
531  
532 **Dr. John Chao:** Actually it's just about to be approved by the FDA.  
533  
534 **Salvador Gaytan:** So, can you install one of those today, or?  
535  
536 **Dr. John Chao:** Yes, I can as an individual dentist, but Dr. Keropian cannot try to  
537 sell it or try to publicize it without FDA approval. So, as an  
538 individual dentist, I can do whatever I feel would be best for the  
539 patient.  
540  
541 **Salvador Gaytan:** Now, what's so great about this new appliance?  
542  
543 **Dr. John Chao:** Well, the other part...  
544  
545 **Salvador Gaytan:** What's it called again?  
546  
547 **Dr. John Chao:** It's called Full Breath.

548  
549 **Salvador Gaytan:** Full Breath.  
550  
551 **Dr. John Chao:** Full breath.  
552  
553 **Salvador Gaytan:** Full?  
554  
555 **Dr. John Chao:** LL, full, Full Breath.  
556  
557 **Salvador Gaytan:** Okay.  
558  
559 **Dr. John Chao:** The other appliances basically move your jaw forward and it  
560 requires generally two of them, upper and lower attachments to  
561 your teeth that can force your jaw forward.  
562  
563 **Salvador Gaytan:** I see.  
564  
565 **Dr. John Chao:** So, it's kind of bulky, and it does move your jaw forward,  
566 sometimes it can cause jaw problems, talking about TMJ problems.  
567 TMJ problems can come up because of that, and teeth can actually  
568 move.  
569  
570 Now, this new appliance goes on the lower teeth, it's got a little  
571 tail on it that pushes the tongue down. If you push the tongue  
572 down, then it creates a small space in the back and that's the way  
573 that appliance increases the airway and controls sleep apnea and  
574 get rid of it.  
575  
576 **Salvador Gaytan:** And allows someone to have sound sleep?  
577  
578 **Dr. John Chao:** Exactly and let their spouse get sound sleep also.  
579  
580 **Salvador Gaytan:** That is an important factor, right?  
581  
582 **Dr. John Chao:** That's the motivating factor a lot of times for patients to come in  
583 and say: "My wife is going to divorce me if I don't get this fixed."  
584  
585 **Salvador Gaytan:** Darn right, darn right, well, we might have to talk more about that,  
586 it's such a fascinating topic. Dr. John, we've come to a first, our  
587 Rapid Fire Five has taken up the entire show.  
588  
589 **Dr. John Chao:** Yes, that's been interesting, that's okay. Whatever is interesting,  
590 let's keep doing it.  
591  
592 **Salvador Gaytan:** So, therefore we'll have to get to the TMJ on another show, but our  
593 next show for the next week is going to be very fascinating, with --

594 we're going to have some students from USC on, and what is that  
595 about?  
596  
597 **Dr. John Chao:** That show is going to be about osteoporosis and how the dentists  
598 are involved with osteoporosis and the side effects of osteoporosis,  
599 how dentists can help with the problem.  
600  
601 **Salvador Gaytan:** It's a very fascinating study that people with osteoporosis can  
602 experience bone loss, and it's a very fascinating study. You're  
603 going to want to hear that. But anyway, we're coming to the  
604 conclusion of our show, Dr. John.  
605  
606 **Dr. John Chao:** Okay, well, we'll see you all next time and we'll look forward to  
607 an interesting show just like today.  
608  
609 **Salvador Gaytan:** And log on to [AlhambraDental.com](http://AlhambraDental.com) and submit your questions.  
610  
611 **Dr. John Chao:** See you later, folks.  
612  
613 [END OF AUDIO]