

1 **Salvador Gaytan:** Welcome to SmileTalk, an entertaining and informative dental talk
2 show, featuring the latest news and developments in dentistry. I'm
3 Salvador Gaytan and I'm here with Dr. John Chao, founder of
4 Alhambra Dental. How are you today, doctor?
5

6 **Dr. John Chao:** Great.
7

8 **Salvador Gaytan:** Now, as I said before in the last show, and this is going to apply
9 for every show, you promised to make it informative, as well as
10 entertaining, isn't that right?
11

12 **Dr. John Chao:** Yes, absolutely. You can look forward to a very interesting,
13 challenging program that will keep you tuned in.
14

15 **Salvador Gaytan:** So now, let's start off with something entertaining right off the bat.
16 When was the first toothbrush made?
17

18 **Dr. John Chao:** Actually, there was a chewing stick, somewhat like a toothbrush,
19 that was made in Babylon around 3500 B.C. This was in the area
20 of Eastern Iraq, that's where Babylon was.
21

22 And then, later on the first toothbrush was actually invented by the
23 Chinese in the 15th century. The bristles were made out of hair
24 from a Siberian wild boar. So, those poor fellows, we used to make
25 toothbrushes, and these toothbrushes were brought from China by
26 the travelers to Europe.
27

28 And then in Europe, it was used, but some Europeans found that
29 the bristles were a little bit too hard. So, they actually resorted to
30 horse hair, and then to other kinds of natural bristles down the
31 centuries.
32

33 **Salvador Gaytan:** Most people probably think that in America, that we've been
34 brushing our teeth forever, but that's not exactly true. When did
35 Americans really start brushing their teeth as a daily habit?
36

37 **Dr. John Chao:** Well, actually the nylon toothbrush didn't come about until the late
38 1930s. So, it was not an accepted standard of hygiene habit to go
39 ahead and brush your teeth everyday.
40

41 It wasn't until the G.I.s came back from World War II, that
42 Americans started brushing their teeth regularly at least once a day.
43 This was because the soldiers were forced to form the habit of
44 brushing when they were serving in the armed forces.
45

46 **Salvador Gaytan:** So, it's only for about 60 years, that Americans have really been
47 brushing their teeth on a daily basis.
48

49 **Dr. John Chao:** Yeah, and the American standard of hygiene of course is among
50 the highest in the world, but it did have a late start.
51

52 **Salvador Gaytan:** A late start, yes. Well, today's show, we are going to go over a
53 couple of topics. One is a very, very popular subject right now,
54 mini implants. And then, we are also going to get into snoring at
55 the end of the show, and things that you can do for that, which
56 most people don't know, that dentists can alleviate snoring. Is that
57 right?
58

59 **Dr. John Chao:** Yes, we have some exciting news for snorers, and those people
60 who actually have sleep apnea problems, and we'll talk about that
61 towards the last half of the show.
62

63 **Salvador Gaytan:** Excellent, excellent. Now, mini implants are a very, very popular
64 topic right now, versus full implants, and you're going to get into
65 that and dentures. And mini implants have only been around for a
66 short period of time, isn't that right?
67

68 **Dr. John Chao:** About maybe eight, nine years. It was approved by the FDA as a
69 safe and effective device around 1999, and then it started to be
70 used around 2000-2001. This is when I started using it mainly for
71 stabilizing dentures.
72

73 **Salvador Gaytan:** I see. Now, for people that don't know exactly what mini implants,
74 to make it simple, it's like a denture, but it's more permanent.
75

76 **Dr. John Chao:** Yeah, implants support dentures. So, if you're wearing a full
77 denture, which means that you don't have any natural teeth at all.
78
79 You're wearing completely artificial teeth, or some of your teeth
80 are missing, and you're wearing some kind of an appliance, then
81 implants can stabilize your dentures, and you wouldn't have to
82 worry about the dentures coming loose.
83

84 **Salvador Gaytan:** Now, you told me about a story that happened, and actually I
85 looked it up on YouTube, and it's a lady who was skydiving, and
86 she smiled. There was another guy in a parachute with a camera,
87 and he said smile wide, and what happened to her dentures?
88

89 **Dr. John Chao:** Well, I think a lot of people saw that too, that she -- when she
90 smiled, unfortunately probably the air broke the suction underneath
91 her upper denture, and it flew out of her mouth.

92
93 **Salvador Gaytan:** So, her choppers flew out?
94
95 **Dr. John Chao:** Yeah, and unfortunately kind of sad, but it did happen to her, and
96 had she had those mini implants, her upper dentures would have
97 been practically locked to those implants, and this probably
98 wouldn't have happened. In fact, she probably could have been
99 eating an apple on the way down, it would have been okay.
100
101 **Salvador Gaytan:** While she was up there, huh?
102
103 **Dr. John Chao:** Yeah, she could have done that.
104
105 **Salvador Gaytan:** So, I guess in...
106
107 **Dr. John Chao:** Well now, this was an older lady, I think she was celebrating her
108 birthday if I'm not wrong, and she was -- it was a kind of a special
109 occasion for her.
110
111 **Salvador Gaytan:** So, regular dentures, people have to use an adhesive to keep the
112 dentures in, but mini implants, they -- it's more like a -- they snap
113 in.
114
115 **Dr. John Chao:** That's correct. If you have implants underneath the dentures, your
116 denture can be clipped on to the implants like buttons. And when
117 that's on, it's pretty stable. It will take quite a bit of work in the
118 early stages for the patients to be able to get the denture out.
119
120 Well, that's a good problem for them, but eventually as they learn
121 to take it out, it becomes easier and easier. But you have to really
122 try to get the denture out. The dentures won't come out
123 accidentally when they are stabilized by implants.
124
125 **Salvador Gaytan:** And again, for anyone just tuning in, I'm Salvador Gaytan, here
126 with Dr. John Chao, founder of Alhambra Dental. For anyone that
127 wants to get in contact with him or submit a question for our next
128 show, his phone number is 626-308-9104, or you can also logon to
129 AlhambraDental.com.
130
131 Now doctor, you had a very fascinating story about a lady,
132 attractive lady, who called you from Wyoming, and she actually
133 wanted to see you. Tell us a little bit about that story.
134
135 **Dr. John Chao:** Well, she had upper full dentures. A very attractive lady,
136 unfortunately she lost all her teeth earlier and she was quite happy
137 with her dentures, at least the way they look, because upper

138 dentures are quite sizeable, quite big. They go all the way back to
139 the soft palate. The soft palate is the soft tissue that raises upward
140 when you say ah.
141
142 So, the denture goes pretty far back, and she was quite unhappy
143 with the size of it. It bothered her when she eats. She can't taste her
144 food as well, and it just didn't make her feel attractive, because it
145 was so large and cumbersome.
146
147 And to a certain extent, she thought it bothered her speech, but as it
148 turned out, it didn't really do that, but she felt the difference.
149
150 **Salvador Gaytan:** So, she had just some conventional dentures that she had to use an
151 adhesive to keep in, and those are always bigger and bulkier. So,
152 you basically made her bulky dentures into mini dentures with the
153 implant, right?
154
155 **Dr. John Chao:** Yes, when she came in, we were able to put these tiny little
156 implants in. What's nice about these implants is that you don't
157 have to actually do any surgery. Basically you put those implants
158 in -- it's almost like a surgical screw that's used when hip implants
159 are put in.
160
161 So, there is hardly any discomfort, hardly any bleeding, almost no
162 bleeding, and there is no discomfort really afterwards. So, we were
163 able to put those implants in, and attach it to her denture, and her
164 dentures were able to be clipped onto those implants, and we had it
165 done for her in a very short time. She was able to fly back almost
166 right away.
167
168 **Salvador Gaytan:** You mentioned something else incredible. She was able to eat right
169 away.
170
171 **Dr. John Chao:** Yes, that's true. She was able to go for a dinner as soon as it was
172 done, because there is just no discomfort associated with that kind
173 of a minimal procedure.
174
175 **Salvador Gaytan:** You were saying her food actually would taste better, because
176 there is less denture on the palate?
177
178 **Dr. John Chao:** Exactly. All of a sudden, we all know that we taste food with our
179 palate, and so with that gone, she actually said that her dream came
180 true, that she was able to get rid of that bulk, and she felt a lot
181 better about herself, because it's almost like she had natural teeth
182 in there.
183

184 So, we had quite a happy lady. I do want to say that she could have
185 found other dentists possibly between Wyoming and California,
186 but she did choose to come to me.

187
188 I was very gratified after she saw my website and had an idea of
189 what we do, but this is a procedure that I want the audience to
190 know that's available, and it is something that dentists, with that
191 training, can offer to denture patients.

192
193 **Salvador Gaytan:** Because the alternative of course, you have the dentures, but you
194 also have conventional stage implants, but those you were
195 mentioning, can take three to six months to set.

196
197 **Dr. John Chao:** That's correct. A conventional denture is three or four, five times
198 bigger than the mini implants that we use for dentures. So, as long
199 as you're using dentures, it's easier to use mini implants, rather
200 than conventional dentures that will need to be implanted into the
201 bone.

202
203 And for that reason, because the wound is bigger, you will need to
204 wait three to six months for the bone to heal and cover, the
205 implants are just placed into the bone, and then attach the dentures
206 to the implants. So, it is a long drawn procedure, even though it is
207 still a very good procedure.

208
209 **Salvador Gaytan:** I see.

210
211 **Dr. John Chao:** Now, I do want to say that conventional implants are good for
212 cases where the patient wants to have crowns or caps done, where
213 the teeth don't come out at all, they are permanently placed.

214
215 But it is a longer procedure, it is more arduous on the patient, but a
216 lot of patients do want natural teeth, and implants in that instance
217 is a very good remedy for them.

218
219 **Salvador Gaytan:** And again, for anyone just tuning in, you're listening to SmileTalk,
220 I'm Salvador Gaytan here with Dr. John Chao, founder of
221 Alhambra Dental, and this is just an entertaining and informative
222 talk show about some of the latest things in dentistry.

223
224 For anyone that wants to get in contact with Dr. John, you can
225 reach him at 626-308-9104, or you can log on to
226 AlhambraDental.com.

227
228 Now, doctor, we have a trivia question we didn't get to in the
229 beginning, but there is a famous, very famous American who was a

230 dentist, and who was also, I believe you said, one of the first
231 forensic dentists.
232
233 **Dr. John Chao:** Yes, it's very interesting. Stay tuned and we'll give you the answer
234 if you don't have it already.
235
236 **Salvador Gaytan:** Okay, now getting back to one of these things about the mini
237 implants. Is there a warranty on these? I mean how many miles do
238 they last? Do they last forever?
239
240 **Dr. John Chao:** Well, I wish they would. They have done very well so far. I've
241 been doing it since 2001, and we just haven't had any cases where
242 this failed. It is approved by the FDA as a permanent device, just
243 as conventional implants are. So, we have very good results, those
244 of us who do this kind of work.
245
246 **Salvador Gaytan:** I see. Are there any restrictions to the type of food that someone
247 can eat? Can they eat anything?
248
249 **Dr. John Chao:** Well, they can eat anything that's within the normal range of
250 foods, vegetables, fruits, apples, different kinds of fruits, but we
251 don't recommend they eat things which are not good for natural
252 teeth either. Nuts, sunflower seeds, popcorn, maybe too harsh on
253 the dentures.
254
255 So, anything that can break your natural teeth, we don't
256 recommend for denture patients, whose dentures are stabilized by
257 implants.
258
259 **Salvador Gaytan:** Now, you were mentioning that -- I mean, because someone might
260 need just the uppers, they might need just the lowers, but you were
261 mentioning that doing the lower implants was more difficult,
262 because the tongue is down there.
263
264 **Dr. John Chao:** Well, actually lower dentures are more difficult for most denture
265 wearers to content with, because the tongue is right in the middle.
266 There's a lot of movement there, and so it's very difficult for
267 patients, especially those who don't have enough bone there.
268
269 So, we do put a lot more implants on the lower jaw than we do the
270 uppers. The lowers actually need more help, and so more
271 frequently we will put mini implants on the lower jaw to stabilize
272 the lower dentures.
273
274 **Salvador Gaytan:** Now, getting to that trivia question, and I don't like to keep the
275 listeners waiting. Who is this famous American, who was a dentist,

276 and was also one of the first forensic dentists, and made a set of
277 dentures for George Washington, is that right?
278
279 **Dr. John Chao:** Yes, as we said at the last show, George Washington had several
280 sets of dentures, and a famous dentist by the name of Greenwood,
281 made him several sets.
282
283 One set was made from ivory, and other sets were made from gold
284 and so on, but it turned out that this person, this very famous
285 person that everybody knows, very intimately connected with the
286 American Revolution, made the set of dentures for George
287 Washington. Just so that we don't keep you in suspense any
288 longer, he was Paul Revere.
289
290 **Salvador Gaytan:** Paul Revere.
291
292 **Dr. John Chao:** Paul Revere was a very good dentist. He was also a great
293 goldsmith and silversmith, and he actually was an illustrator, and a
294 graver for currencies. He drew a lot of political cartoons, and was
295 quite active as a military leader, and a political activist.
296
297 But he was also a dentist, and he did make a set of teeth for George
298 Washington. The story was that Paul Revere had a friend by the
299 name of Dr. Joseph Warren, who was one of the famous Sons of
300 Liberty.
301
302 Dr. Warren was killed earlier in the revolutionary war, and for
303 reasons we don't know, he was crypt and buried in a cemetery near
304 Bunker Hill. The patriots at that time wanted to give Dr. Warren a
305 good hero's burial, but they couldn't identify his body.
306
307 But Paul Revere was able to identify Dr. Warren, because earlier
308 on Paul Revere had made a special bridge for him. So, by looking
309 at the bridge, examining it, then finding out that that was the bridge
310 that he made, Paul Revere became the first forensic dentist. So, in
311 fact he was the one who started the whole field of dental forensics.
312
313 **Salvador Gaytan:** So, he was able to identify his friend.
314
315 **Dr. John Chao:** Because of the fixed bridge.
316
317 **Salvador Gaytan:** The fixed bridge.
318
319 **Dr. John Chao:** The fixed bridge that he had made for Dr. Warren.
320

321 **Salvador Gaytan:** Now, another interesting tidbit about George Washington, which
322 you mentioned to me, that we see a lot of pictures of George
323 Washington, and he has a very stern, stoic look in his face, and his
324 mouth there. You've come up with some information that reveals
325 why that is.
326

327 **Dr. John Chao:** He was actually quite an active, a friendly, kind gentleman, he was
328 not always stern. It just so happened that that portrait was made
329 when he was wearing a special set of dentures.
330
331 The upper denture and the lower dentures were connected with a
332 spring, that would force his mouth open. So, he had to keep biting
333 on his teeth, so that his dentures didn't pop out.
334
335 So, he had to keep his mouth closed, so therefore it gave him that
336 very stern look, but in actuality, history has told us that he was
337 quite a gregarious, friendly, a very outgoing person. So, the portrait
338 actually didn't do him justice.
339

340 **Salvador Gaytan:** I see, I see, very interesting. And again, you are listening to
341 SmileTalk. I am Salvador Gaytan, here with Dr. John Chao,
342 founder of Alhambra Dental. Anyone wanting to get in contact
343 with Dr. Chao can reach him at 626-308-9014, or if you'd like to
344 submit a question for next show, you can logon to
345 AlhambraDental.com.
346
347 Now Dr. John, we said we were going to get to snoring and sleep
348 apnea at the end of the show. So, we are at this point, and I just
349 have a little funny story, and I'm going to see if you can help.
350
351 I was staying at a friend's house one time, and in the bedroom was
352 my friend and his wife. And I was just about to go to sleep, and I
353 heard this rumbling, and I thought to myself, "Wait, how is she
354 sleeping through this?"
355
356 I had to move to another bedroom, so I could get away from the
357 rumbling. Now, if someone comes to you, and has some snoring
358 issues, can you help them?
359

360 **Dr. John Chao:** Very definitely. This is one of the things that dentists, who are
361 trained for this, can actually do. Snoring is caused by the closing of
362 the throat behind the tongue. The tongue actually falls backwards,
363 and it somewhat closes the throat.
364
365 So, with the air going to the lungs, the soft tissue that's relaxed
366 now, during certain stages of sleep, begins to vibrate. And the

367 vibration then causes the snoring noise. So, if a person is a very
368 big, very stout -- was he very heavy, he was a big guy?
369

370 **Salvador Gaytan:** He was a medium size, yes.
371

372 **Dr. John Chao:** Medium sized guy, yeah, and so he's going to have to breathe, no
373 matter what. So, he is just going to breathe really hard and bring
374 that air in. And he is totally oblivious to it. Most snorers, they will
375 swear that they don't, and only if somebody else can tell them.
376

377 And a lot of times, they will deny the fact that they even have that.
378 And so, there are appliances that can help or eliminate the snoring
379 problem.
380

381 Basically, if we can move the lower jaw forward with a bite guard
382 or a snore guard, we can fixate the lower jaw somewhat forward,
383 then the tongue also generally goes with the lower jaw, and that
384 opens up the airway enough to where you don't have this vibration
385 in the back.
386

387 So, that's something that's quite effective. The problem is, when
388 you snore like that, especially with your friend, it could lead to a
389 more serious problem called sleep apnea. So, when we treat people
390 for snoring, we always have to ask ourselves, does this person have
391 sleep apnea?
392

393 **Salvador Gaytan:** Now, how are you -- if someone comes in to you, and they say,
394 "Doctor, I have a snoring problem, can you help me?" How do you
395 evaluate if it's snoring or sleep apnea?
396

397 **Dr. John Chao:** Well, first of all, we will ask the spouse or whoever knows him to
398 see whether he actually stops breathing during the night for any
399 period of time. The rule is, if you have stoppage of breathing for
400 over 10 seconds, and it's more than 10 to 20 times per hour, then
401 it's considered that you have a mild case of sleep apnea.
402

403 If your breathing stops 20 to 30 times an hour for 10 seconds or
404 more each time, then you have moderate sleep apnea. If it's more
405 than 30 times per hour, then it's considered severe.
406

407 Sleep apnea is a very serious problem, because it does lead to
408 cardiovascular problems, heart attacks, strokes, certainly high
409 blood pressure, and other kinds of diseases, even diabetes.
410

411 **Salvador Gaytan:** Now, you were saying that sometimes you will evaluate a client,
412 and you'll send them home with some kind of a monitor to test
413 their snoring?
414

415 **Dr. John Chao:** Yeah, before I even do that, I will ask the question, does this
416 person have daytime tiredness? Some of the more severe
417 symptoms would be falling asleep or getting very tired when they
418 are driving, or do they get tired when they sit down?
419

420 Do they get tired when they sit down or watch TV or read a book?
421 Different signs of daytime tiredness would be a signal, that there
422 might be a sleep apnea problem, the fact that when the patient
423 wakes up, there is still a lot of tiredness when they wake up.
424

425 So, that kind of symptoms would help me to diagnose, to at least
426 suspect that the snoring has introduced a more serious problem.
427 But {short of that}, if there are no symptoms, I would still give
428 them a home monitor that they can sleep with.
429

430 It attaches to the wrist, and it measures the oxygen saturation rate
431 in the blood, and make sure certain signs -- if those signs are
432 relatively normal, then we can treat the patient just for snoring.
433 Otherwise, we have to do diagnostics, refer the patient out to a
434 physician for further testing.
435

436 **Salvador Gaytan:** So, you can make a device in one trip?
437

438 **Dr. John Chao:** Generally it will take at least two sessions, and possibly some
439 additional adjustment sessions.
440

441 **Salvador Gaytan:** I see, I see. Okay, we are coming to the conclusion of our show Dr.
442 John, and as you promised, it's been informative and entertaining.
443 And for anyone that wants to get in contact with Dr. John, you can
444 reach him at 626-308-9104. Or if you'd like to submit a question
445 for our next show, you can logon to AlhambraDental.com.
446

447 **Dr. John Chao:** Feel free to let us know your thoughts and your comments.
448

449 **Salvador Gaytan:** Well doctor, what'd you think of today's show?
450

451 **Dr. John Chao:** I think it was great. Sorry, we don't have enough time to talk about
452 snoring, but maybe we can continue that subject at the next show.
453

454 **Salvador Gaytan:** Absolutely, and on the next show, we are also going to get into a
455 favorite topic, bad breath. And there's a lot to say about that and
456 what the doctor can do for you.

457

458 *Dr. John Chao:* Tune in next Saturday at 6 pm.

459

460 *Salvador Gaytan:* For SmileTalk, we'll see you next show.

461

462 [END OF AUDIO]