

Dr. Ben Balevi - Are Oral Cancer Adjunctive Devices Beneficial in General Dental Practice?

Dr. O'Keefe: In a few months time, we'll all be gathering in Toronto for the ODA Annual Spring Meeting. May 9th to the 11th. And today, is the latest in our series of conversations with speakers at that conference; we're talking with Dr. Ben Balevi. He's a general practitioner in Vancouver, British Columbia and he's a well-known presenter across North America of the application of the evidence-based dentistry principles in everyday general dental practice clinical decision making at its best. I don't want to ask him a question about whether those oral cancer detection devices have a place in my general practice. Ben, are oral cancer adjunctive screening devices beneficial in general dental practice?

Dr. Balevi: Well, as you know, John, a lot of people have asked me that question over the years and my answer hasn't changed. It's no. These adjunctive devices are not, I don't recommend these adjunctive devices for screening of oral cancer in general practice. And the reason why is because these devices are likely to cause more harm and fear in a patient, unnecessary fear in a patient with very little evidence of being any beneficial to patients than what we already have. Now, how is it or could it cause harm? Well, the answer is because these devices as a screening device for oral cancer in general practice have very high false positives. The false positive is over 99%. What does that mean? It means that for about every, for every 100 positive readings, 99 or more than 99 of them will be wrong. And, when you take into account that these devices aren't very specific, they'll show positive for any oral lesions and 40% of your patients will present with an oral lesion that there's about a 40% chance you'll get a positive reading from a canker sore or from Lichen planus and it'll show as positive. And that creates a situation where you create the fear and stress in the patient that they have cancer when it's highly unlikely they do.

Dr. O'Keefe: Have you got any guidelines to help me where to use these devices?

Dr. Balevi: Oh yes, yes. My opinions have been recently supported or confirmed by the American Dental Association's Center for Evidence-Based Dentistry, Clinical Practice Guidelines on the evaluation of premalignant lesions in the oral cavity. And, if you allow me to show you them and show it, kind of summarize what they are, you'll appreciate it better.

Dr. Balevi: Recently, the American Dental Association's Center for Evidence-Based Dentistry published these guidelines on the evaluation of potential malignant disorders in the oral cavity. And, they evaluated all the evidence of all the adjunctive devices that are out there. And as you can see that in every device except maybe one, they do not recommend it as a device that should be used in

general practice. The exception is the psychological tests, which I'll get to in a second.

Dr. Balevi: But these guidelines are evidence based where they looked at all the evidence that exists. And then from these evidences they make recommendations for clinical practice. Now, what these guidelines also offer, is kind of an algorithm for a decision tree, a decision that you do in clinical practice. So, they come out with this kind of, this algorithm. So, for example, you see a patient that has no lesions, then what you do is you do nothing, you don't do anything, but about 40% of the time you're going to see a lesion in someone's mouth. Most of the time you're going to think they're not really malignant. But you still want to follow it and you'll follow it up. But if you do become suspicious that it's not resolved, and you don't know what it is, then you might choose to do a biopsy.

Dr. Balevi: And then when you do a biopsy, then it'll either confirm or refute the diagnosis of oral cancer and the patient knows for sure. But, what about those cases where you see a lesion and you really are very suspicious that it's a malignant lesion? Well, then in those cases, you would then refer for a biopsy. Now, what the American Dental Association recommended is in those patients you just don't want a biopsy, but you really do think that there might be a potential cancer in there, that they will recommend the psychological test, adjunctive test, and that test, if it's positive, then assures you that there's a good chance that might be cancer and if it's negative, it assures the patient that it's not cancer.