

Dr. Seema Ganatra - Alberta Wellness Summit; What is the Role of Dentists in HPV-Related Oropharyngeal Cancer?

Dr. O'Keefe: On Friday, May the 24th Dr. Seema Ganatra, an oral pathology specialist from Edmonton will be presenting at the Alberta Dental Association and College conference in Calgary. She'll be speaking about HPV and oral and pharyngeal cancer. I've caught up with her today to ask her some specific questions about aspects of that presentation. This will give you a foretaste of the topics she'd be presenting on and her style of presentation. Seema, why is this topic so important right now?

Dr. Ganatra: I think there are a number of factors. You know, this oropharyngeal carcinoma or cancer is on the rise, and I just like to categorize them for the audience. oropharyngeal carcinomas can be HPV positive or they can be categorized as HPV negative. And what we're seeing now is that the incidence of HPV negative oropharyngeal carcinoma, the things that we have been seeing for decades, related to tobacco and alcohol use, this has decreased by about 50% in the period between 1988 and 2004. However, conversely, the incidence of HPV positive oropharyngeal carcinoma, which has no association with tobacco and alcohol, has increased by 225% during that same period. And this is actually considered a sexually transmitted disease. And what we're seeing, the trend is that this is occurring more in young males, relatively young males compared to the HPV negative cancers.

Dr. Ganatra: And I think that when you look at this slide, you know, it is making headlines, not just because of the people that are famous that have this, but just also that it is becoming somewhat of an epidemic. It's increasing by 5%, incidents are increasing by 5% per year. And so, it is on the rise. And, that's why this is important and why it's important now. I'd like to clarify a couple of points. There is some confusion regarding oral cancer versus oropharyngeal cancer. And just to define the areas of involvement. Oral cancers are the ones that we are going see as dentists, you know, anything anterior to the middle two thirds of the tongue. All the structures and tissues that we examine or involved with. However, oropharyngeal refers to the posterior region. So, the posterior third of the tongue, the base of the tongue, which is hard for us to examine, the tonsils, the posterior pharyngeal wall.

Dr. Ganatra: And so, I think we have to distinguish those to understand further what our role as dentists can be. And there's also another term, head and neck squamous cell carcinoma, and that encompasses both. That's oral and oropharyngeal. So, when you know you're reading the literature, that's what you're going to kind of encounter at this point in time. And if I could just take this time to show you this little diagram, you know, the oral pharynx is defined by this very small area here. Okay. And so there you have the base of the tongue, which contains the

lingual tonsil, lots of tonsillar tissue there. You can't see the pharyngeal tonsils or the lateral pharyngeal tonsils, but they're right in this region. And then, you've got the posterior pharyngeal wall and you've got kind of just inferior to that as well.

Dr. Ganatra: So, as you can see, there is a difference. And, let me talk about the clinical presentation of HPV positive oropharyngeal carcinoma. This is something that's really important. This commonly presents as a neck mass and it may be the first and only presentation of this condition, this disease. What that neck mass is, it is metastasis to that lymph node. And these usually are from coming from the palatine tonsil or the lingual tonsil. Oropharyngeal carcinoma has also been referred to as tonsillar cancer. The neck mass represents an advanced stage of cancer because it's spread to the nodes or it's a large size at the primary and in this cancer metastasis occurs [inaudible]. The other symptoms to watch for or to ask and if your patients mention is basically, they may have pain or difficulty swallowing. They may have something that's called a globus sensation, which just feels like there's something in their throat like a lump.

Dr. Ganatra: And they may also have referred ear pain. These are the things to watch for. What do we see intraorally? Again, this is important to us as dentists. Usually we don't see anything, because these cancers involve the posterior oral regions and the oral pharynx, and we can't see those areas easily. Again, we don't have any premalignant lesions that these oropharyngeal carcinomas present as, we have leukoplakia and oral cancer, which is a good thing, but we don't have that because the way this cancer works is the HPV infection occurs deep within the epithelium in the tonsillar crypts and it invades deeper; and so we don't have surface lesions, we can't see them. Okay. So, this is why, this is why I come to this slide. Now that we do have some limitations as dentists. Again, oropharyngeal examination is difficult for us, but we can examine the soft palate, the uvula, palatine tonsils, all those regions, sometimes the base of the tongue, which is difficult, but sometimes we can.

Dr. Ganatra: So, that leads me into asking what can we do? We need to examine the neck properly, we need to listen to the patient if they had mentioned symptoms. And then we also need to follow up. You can have the patient come back and you know, maybe in a two-week time, but if there's no changes, next steps need to be taken, which I will discuss later on. So, the role of the dentist, quite important here, what you need to do or what we need to do, I should say is a thorough extra- and intra-oral examination and that is referred to as head and neck cancer screening. It is really important to examine the neck, the lymph node involvement. And I know this is somewhere this is a place where we feel that it's difficult as dentists. It's something that's Not familiar to us, but I think the more we practice, we will get better, and we need to do it.

Dr. Ganatra: And then again, the role becomes later that once you have something, we need to take care of them. There's a really great video that I use for my dental students. And I've got the web link here, but it's really worthwhile seeing, it's an 11-minute video, but it goes over intra-oral, extra-oral neck examination. Speaking of which now, just to get into the neck examination, the key points, some things you have to watch for is, are these areas that we're examining, if there is something there, is it a present on both sides of the neck? We have to be aware if it can be a normal anatomy versus abnormal. And as you do more examinations that will come easier and easily. You can always compare it to the opposite side, and you have to observe and palpate. Feeling these areas is really, really important.

Dr. Ganatra: And there's certain characteristics that I will go over in the next slide, but these are the nodal zones that we are asked to examine. And I will go over these when I go through the video that I've got lined up. Okay. What characteristics do we look for? We look for size, how they feel if they're moving and if there's any symptoms, pain, warmth etc. Normal nodes for our reference should be small, mobile and are generally non painful okay. Now, I have a video that I have prepared that shows how I do a neck examination. And, I think we'll take a look at that.

Dr. Ganatra: So, this is what I do for neck examination. I basically start with my [inaudible] and the submandibular region. I palpate down the anterior portion of the sternocleidomastoid muscle and then I palpate the posterior region and I come back up. That is just preliminary so I'm just feeling for that in general neck nodes and then I go into the occipital region because there are no nodes there.

Dr. Ganatra: I'll ask the patient to turn and I place my palpating fingers in the anterior portion of the sternocleidomastoid muscle with my other hand as the stabilizing. Now I've switched over and I'm doing the palpation of the posterior portion of the sternocleidomastoid muscle that's the posterior cervical chain. After that I go down towards the scapular region and I just feel if there are any nodes there because that's where cancers can metastasize. I just finished off palpating the thyroid and asking the patient to swallow palpating the submandibular region. And then I just [inaudible] the cheeks over the mandible, I'm feeling for the [inaudible] nodes right now. And then I'm feeling for the submandibular gland and the submandibular nodes and then back up and I'm going into the parotid region and palpating parotid lymph nodes as well as the gland, just around that area and the buccal, the cheek region. I do palpate [inaudible] nodes there.

Dr. Ganatra: So, as I was mentioning, once you find something or detect something, what's the next step? What do we need to do as dentists? Well, first of all, I really think again that being aware of these signs especially anything in the neck is really important for us because we have to be aware. We have to educate ourselves. For sure detection of a neck mass means that there has to be further testing

examination. You can't just leave those things alone. The main way to do this, and this is probably easier for oral surgeons, oral pathologists, oral medicine specialists to do, but we generally will then refer to the ear, nose and throat specialist. The way that dentists can do this is to ask their patient to ask their physician, the family physician to arrange that referral.

Dr. Ganatra: It's really important because I think it's difficult in most instances for general dentists to have access to those ear, nose and throat specialists. What the ear, nose and throat specialist must do and will do is they'll do a nasopharyngoscopy with a flexible camera and they will look at all of those areas to see where that primary lesion is. If there is one. In addition, what bill do usually at least head and neck tumor boards. The hospitals where it's a multidisciplinary clinic in a multidisciplinary group, they will order advanced imaging, sorry, CT scans, PET scans, and they may even do a fine needle aspiration of the involved lymph nodes. But again, our role is to get our patients to the right person down the chain so that they are taken care of.

Dr. O'Keefe: Dr. Seema Ganatra thank you so much for taking time out today to demonstrate to us and walk us through this really important area in terms of the role of the dentist in cancer prevention and early detection.

Dr. Ganatra: Thank you so much.