



HPV Advances: A Patient Education Program

Two Main Causes of Head and Neck Cancer

Dr. Wendell Yarbrough - MD, MMHC, FACS, Chair, Department of Otolaryngology/Head and Neck Surgery, University of North Carolina at Chapel Hill School of Medicine

Welcome, I'm Wendell Yarbrough. I'm Chairman of Otolaryngology at UNC, School of Medicine, and I'm really happy to be here today to talk about HPV-associated Head and Neck cancers, and treatment de-escalation strategies, and how we select appropriate patients for the de-escalation. I have no disclosures to share, but I do want to just go over our objectives for the talk today. First, I want to just introduce head and neck cancer. I want to describe two types of head and neck cancer and outline treatment modalities that have been developed for these cancers. I also want to review strategies and goals for therapeutic de-escalation in HPV-associated head and neck cancer, and I'll identify barriers and solutions to identify the appropriate patients for de-escalation. So, we'll go through all of this, but let me just start by introducing head and neck cancer a little bit.

I think head and neck cancer really is misunderstood. When somebody talks to you about breast cancer or lung cancer, I think most people have a pretty good idea of what that is. But in head and neck cancer, even physicians that are not in the field sometimes are not quite sure what it is. But when we're talking about HPV, I mean we're talking about head and neck cancers; we're really talking about cancers that affect the upper aerodigestive tract. And, I like to refer to this as where we live. This has to do with what makes us human and cancers in this area affect communication and hearing, breathing, facial appearance, chewing, swallowing, taste and smells. So you can't just put a shirt over it. You can't cover it up. This is really where we live. Now, the vast majority of these cancers are histology types called Squamous Cell Carcinomas.

So, there's two main causes of head and neck cancer, and there's two main types of head and neck cancer. One is caused by tobacco, and one is caused by the human papillomavirus. And you can distinguish these two types of cancers based on patient characteristics, subsites involved; and I'll go through a little bit of the differences between those that you can see over here on the right. Tobacco-related cancers occur in older patients. All subsites that we've just shown are involved in tobacco-related cancers, whereas tonsil and tongue-base, and here we call the oropharynx that is involved in HPV-associated cancer. Alcohol is related to the cause of tobacco-related cancers, and HPV-related cancers are rarely a sexually-transmitted diseases. Tobacco-related cancers occur in smokers, whereas HPV-related cancers can occur in smokers, but there's a larger portion of non-smokers. Tobacco-related cancers, there's really no prevention other than not smoking, but for HPV-related, there is a preventative vaccine. We can talk more about that later. Both cancers have about a four-to-one male-to-female prevalence. And there is a pre-cancer state in the tobacco-related ones, but in the HPV-associated cancers, there's no early detectable lesions. So for the rest of this talk, we're gonna focus on this subtype; the human papillomavirus-associated head and neck cancers.