Leukoplakia of the tongue, cheeks, and gums and cancer development

Dear OncoLink "Ask the Experts,"

How long can a person have leukoplakia of the tongue, cheeks, and gums before cancer develops?

Gregory S. Weinstein, MD, FACS, Founding Member and Associate Director of the center for Head and Neck Cancer, at the University of Pennsylvania Medical Center, responds:

This is a good question. There are two important issues here. Firstly, there are a spectrum of changes in the lining of the throat, mouth or larynx, ranging from dysplasia, to carcinoma in situ, to microinvasive cancer and finally to deeply invasive cancer. All of these can be present in the white lesions that we call leukoplakia. Most of the time, biopsy of a leukoplakia or white lesion of the lining of the mouth, throat or larynx is done by taking only a small portion of the white area. This means that the pathologist (the doctor who examines the tissue under the microscope) only can see a small portion of the lesion (since most of it is left in the patient). Therefore there could be a precancerous lesion or even a cancer in some other part of the specimen that is still in the patient. So, if the white lesion is entirely removable without causing the patient a significant problem with eating or speaking, then it may be advisable to recommend removing the whole thing so we know exactly what we are dealing with. If the final diagnosis is then benign, the patient should be followed every few months for recurrence and reexcision, which occurs occasionally. If on the other hand cancer is discovered in the lesion, then additional treatment can be recommended at that time. If the white lesion is too big to remove, it may be preferable to remove as much as possible, even with multiple excisions and perform small biopsies on the remaining portions of the lesion. The patient may then be followed closely looking for growth or change.

Now secondly, to answer your question specifically, no one can predict how long it would take a leukoplakia to become a cancer. This is why it may be preferable to remove the whole thing when the side effects of surgery are predicted to be low. The problem comes in the rare situation when the leukoplakia is extensive and removing the entire lesion is not feasible. In those situations removal of as much as possible, with small biopsies of the remainder, and close follow-up may be the best approach.

Gregory S. Weinstein
7/24/06
No