Tobacco and alcohol use independently increase risk of head and neck cancer
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Cigarette smoking is more strongly associated with head and neck cancers than drinking alcohol, according to a study in the May 16 issue of the Journal of the National Cancer Institute. The study found that smoking is responsible for a quarter of head and neck cancers among individuals who do not drink alcohol.

At least 75 percent of head and neck cancers are caused by a combination of cigarette smoking and drinking alcohol, but researchers have not known the individual contributions of these risk factors because people who smoke are more likely to drink than the general population and vice versa. In a new study, researchers sought to tease out the independent effect of each risk factor on head and neck cancer development.

Mia Hashibe, Ph.D., of the International Agency for Cancer Research in Lyon, France, and colleagues examined head and neck cancer risk among smokers who never drank alcohol and people who drink but never used tobacco products. They pooled data from 15 case–control studies, which included 10,244 head and neck cancer patients and 15,227 controls. About 16 percent of the patients and 27 percent of the controls never drank, and about 11 percent of the patients and 38 percent of the controls never smoked.

Cigarette smoking was associated with an increased risk of head and neck cancer—especially cancer of the larynx—among patients who never drank alcohol. About 24 percent of head and neck cancers were due to smoking among patients who never drank.

Drinking alcohol was also associated with greater risk of head and neck cancers among never smokers, but mainly for patients who drank three or more drinks per day. They had twice the risk of head and neck cancers as people who never drink. Only seven percent of head and neck cancers were due to drinking among never smokers.

“The major strength of our pooled analyses was assembly of a very large series of never users of tobacco and never drinkers among head and neck cancer patients and control subjects, which allowed us to examine head and neck cancer risks in detail and to explore differences in risks by cancer subsite, geographic region, and sex,” the authors write.

Source: Journal of the National Cancer Institute