

Viruses may play a role in lung cancer development

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Papers presented at the 1st European Lung Cancer Conference, jointly organized by the European Society for Medical Oncology (ESMO) and the International Association for the Study of Lung Cancer (IASLC) in Geneva, Switzerland highlight emerging evidence that common viruses may contribute to the development of lung cancer.

Experts agree that smoking is by far the most important factor that contributes to lung cancer development. But other factors can play a role in some cases.

In one report at the conference Dr. Arash Rezazadeh and colleagues from the University of Louisville, Kentucky, USA, describe the results of a study on 23 lung cancer samples from patients in Kentucky.

The researchers found six samples that tested positive for the presence of human papilloma virus (HPV), the virus that also causes many cases of cervical cancer. One was later shown to be a cervical cancer that had spread to the lungs.

Of the remaining 5 virus-positive samples, two were HPV type 16, two were HPV type 11 and one was HPV type 22. "The fact that five out of 22 non-small-cell lung cancer samples were HPV-positive supports the assumption that HPV contributes to the development of non-small-cell lung cancer," the authors say.

All the patients in this study were also smokers, Dr. Rezazadeh notes.

"We think HPV has a role as a co-carcinogen which increases the risk of cancer in a smoking population," he says.

In another paper (Abstract No. 125PD; Friday 25th April, 09:50), Israeli researchers suggest that measles virus may also be a factor in some lung cancers. Their study included 65 patients with non-small-cell lung cancer, of whom more than half had evidence of measles virus in tissue samples taken from their cancer.

"Measles virus is a ubiquitous human virus that may be involved in the pathogenesis of lung cancer," says lead author Prof. Samuel Ariad from Soroka Medical Center in Beer Sheva, Israel. "Most likely, it acts in modifying the effect of other carcinogens and not as a causative factor by itself."

Source: European Society for Medical Oncology

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