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Quadruple primary malignancies of liver, bladder, lung and stomach in one patient

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ABSTRACT

Multiple primary malignancies are defined as two or more malignancies in an individual without any relationship between the tumors. Because of advances in the early detection, treatment, and supportive care for cancer, the number of cancer survivors has been gradually increasing, and this has led to an increase in the possible occurrence of subsequent malignancies. Recently, there have been reports that smoking is associated with a specific genetic mutation (the tumor suppressor gene *TP53*), and this genetic predisposition may be related to the development of multiple primary malignancies. Here we present a rare case of quadruple primary malignancies of the liver, bladder, lung and stomach, some of which possibly linked to smoking-related *TP53* mutation. Because of its extreme rarity and the clear relationship between multiple primary malignancies and smoking-related *TP53* mutation, we report this case along with a review of the relevant literature. Free full text available at www.tumorionline.it

Key words: multiple primary neoplasms, tumor suppressor gene TP53, liver neoplasm, bladder neoplasm, lung neoplasm, stomach neoplasm.

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