The development of multiple synchronous tumours in an individual could be due to exposure to an omnipotent carcinogenic factor or genetic predisposition.

**Result of the same carcinogen**

The aerodigestive tract is well known for its propensity to develop multiple cancers as a result of exposure to the same carcinogen such as cigarettesmoke or alcohol. Squamous cell carcinoma of the head and neck is complicated by a second primary carcinoma of the head and neck, oesophagus or lung in 10% to 40% of patients. Similarly, in patients with squamous cell carcinoma of the oesophagus, about 10% developed a second non-oesophageal primary cancer, 70% of which were aerodigestive tract cancers. The high risk of having a second primary cancer calls for routine panendoscopy in patients diagnosed with aerodigestive tract cancer.

For any given level of exposure to a carcinogen, only a portion of exposed individuals will develop cancer. It is evident that there are differences in genetic susceptibility to cancer on exposure to carcinogens amongst different individuals. In particular, mutagen-sensitive persons have a four-fold increased risk of developing multiple primary cancers on exposure to carcinogens.

**Genetic predisposition**

Family history of cancer, early age of cancer onset and multiple primary cancers are hallmarks of hereditary cancer syndromes. Examples of such syndromes include hereditary nonpolyposis colorectal cancer, familial adenomatous polyposis, hereditary breast and ovarian cancers, and multiple endocrine neoplasia type 2.

Apart from these two causes, the incidences of many cancers increase rapidly with age, and elderly individuals stand a higher chance of developing multiple cancers. In fact, the reported prevalence of multiple cancers in geriatric patients ranges from 2% to 11%. Nevertheless, epidemiological data suggest that age itself is not a direct cause of cancer, but rather that it is a surrogate of prolonged carcinogen exposure.

In this issue of the Asian Journal of Surgery, the case of an elderly patient with triple early cancers of the stomach, colon and gallbladder is reported. The authors are to be congratulated in being able to detect these three malignancies in their early stages in an asymptomatic individual. In Japan, where population screening for gastric cancer is practised, early gastric cancer constitutes about 50% of all new cases. Due to the known morbidities associated with radical gastrectomy, various treatment modalities such as endoscopic mucosal resection, laparoscopic wedge resection or laparoscopic gastrectomy have been introduced for the treatment of early gastric cancer. It is interesting that the authors have chosen an aggressive treatment for the gallbladder carcinoma, while the colon carcinoma was treated endoscopically.

**References**