

History of Previous Cancer in Patients Undergoing Resection for Pancreatic Adenocarcinoma

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Context The increase in mean expectancy of life observed in recent years in industrialized countries revealed how cellular aging processes lead to an higher risk of cancer development. This is the reason why surgeons are nowadays often facing with patients whose clinical history is positive for different tumors. Literature suggests a possible association between pancreatic and other cancers, with a genetic substrate probably but not exclusively implicated. **Objective** Evaluation of the prevalence of other tumors among patient with pancreatic ductal adenocarcinoma (PDAC) resected in a tertiary care center. **Methods** Between January 2010 and June 2013 we performed 161 pancreatic resection for PDAC. In the present study we retrospectively analyzed past medical history of these patients searching for previous occurred neoplasms. Epidemiological data about cancer occurrence in our country were obtained from Tumors Registry Italian Association (AIRTUM) and ISS Epidemiology Service. **Results** Mean age of our 161 resected PDAC patients was 68±10 years. Among them, 35 (21.7%) had a previous history of cancer, diagnosed at a mean age of 60±11 years. The more frequent tumors observed were breast (n=15; 9.3%) and genitourinary tract neoplasms (n=11;

6.8%), of which 5 prostate cancer (3.1%). According to AIRTUM database, standardized breast cancer prevalence in Italy is 1,869/100,000 females (1.9%), while standardized prostate cancer prevalence is 896/100,000 (0.9%). Most of the patients with prostate or breast cancer (73%) received diagnosis of resectable pancreatic cancer during the follow-up of the previous neoplasm. However, the PDAC stage on surgical specimens of these patients (according to AJCC, TNM 7th Ed) was not significantly lower compared with the control group of patients without a previous cancer (P=0.181). **Conclusions** Even though breast and prostate cancer are notoriously high incidence and long survival related cancers, their prevalence among PDAC patients seems to be interestingly higher than in standard population. Further studies are necessary to investigate genetic and environmental bases of this relationship. A clinical implication of this correlation could be a different proportion of resectable and advanced PDAC at diagnosis among patient performing an oncological follow-up. For this reason, an accurate radiological assessment adequate for pancreas evaluation should be suggested during follow up of patient treated for breast and genitourinary cancer.