

Presenting Symptoms of Pancreatic Adenocarcinoma Are Related to Diagnostic Delay and Stage at Diagnosis

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Context Pancreatic ductal adenocarcinoma (PDAC), is an aggressive neoplasm, with an high mortality rate linked to its advanced stage in most cases at diagnosis. The advanced stage may depend on the diagnostic delay due to unspecific symptoms. However, only few studies investigated the relation between presenting symptoms, diagnostic delay and stage of disease in PDAC. **Objective:** To assess whether different presenting symptoms result in different diagnostic delay (defined as months from the very first symptom and diagnosis) and stage of disease in PDAC patients. **Methods** Retrospective analysis of a prospectively collected database including data on demographics, presentation symptoms, diagnostic delay and disease stage at diagnosis in PDAC patients seen at our Unit between 2005-2012. **Results** Two-hundreds and 27 PDAC patients enrolled (125 males, 55%; mean age at diagnosis 68 years). The most frequent presentation symptoms were jaundice (102 patients, 44%), weight loss (115 patients, 50.6%) and recent onset (diagnosed in the last 12 months before PDAC diagnosis) diabetes (41 patients, 18%). Patients presenting with or without jaundice did not have a different mean diagnostic delay (3.7 vs. 3.8 months; $P=0.9$), but patients with jaundice were more frequently resectable at diagnosis than non jaundiced patients (41.2% vs. 25%; $P=0.01$). Patients with or

without recent-onset diabetes did not have a different diagnostic delay (3.9 vs. 3.8 months; $P=0.9$), without an impact on disease stage at diagnosis. On the other hand, patients who experienced a weight loss greater than 5 kg before diagnosis, not only had a longer diagnostic delay than those without weight loss (5 vs. 2.44 months; $P=0.0001$), but were also more frequently metastatic at diagnosis (46.1% vs. 33.1%; $P=0.05$). Patients with weight loss were also more often males (61% vs. 26%; $P=0.009$) and had higher CA 19-9 than those without (mean 11,369 vs. 2,735; $P=0.05$), while mean CA 19-9 values, sex distribution, mean age and mean primary tumour size were all not different in subgroups of patients classified according to the presence/absence of other symptoms. **Conclusion** When analyzing distinct presentation symptoms of PDAC, only weight loss is associated with a longer diagnostic delay, and this results in a more advanced disease stage at diagnosis. The presence of jaundice is not related with the diagnostic delay, but with a more favourable disease stage at diagnosis. Weight loss seems an undervalued alarm symptom associated with aggressive PDAC. Future studies should consider whether these symptoms, or their combination, independently affect the efficacy of treatments and survival.