Are Extra-Pancreatic Malignancies More Prevalent in Patients with Intraductal Papillary Mucinous Neoplasm of the Pancreas?

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**BACKGROUND**

- The association between the presence of an intraductal papillary mucinous neoplasm (IPMN) of the pancreas and the prevalence of extra-pancreatic malignancies (EPM) remains unclear.
- The need to screen for an EPM in such patients is controversial and could lead to an additional burden on resources given the increased incidental detection of IPMNs on cross-sectional imaging.

**OBJECTIVES**

- To determine whether the prevalence of EPM is higher in IPMN patients when compared to the general Maltese population.
- Should IPMN patients undergo intensified radiological investigations in search for a possible underlying EPM?

**METHODS**

- Single-centre, retrospective study.
- Patients with an incidental radiological diagnosis on magnetic resonance imaging (MRI) between 2010 and 2017 were recruited.
- Prevalence of a previous history or synchronous diagnosis of EPM was recorded by reviewing electronic histopathology results of biopsies or resection specimens.
- EPM was defined as per ICD-10 COO-80 codes (International Statistical Classification of Diseases and Related Health Problems), thus excluding non-melanoma skin cancer and haematological malignancies.
- All EPMs were based on a tissue diagnosis.
- The prevalence of EPM was calculated and compared with the lifetime prevalence of developing EPM (ICD-10, C00-C80) in the general Maltese population.

**RESULTS**

- 36 out of 175 IPMN patients were found to have an EPM, resulting in a prevalence of 20.6%.
- Commonest malignancies consisted of breast 30.6% (n=11), colorectal 25.0% (n=9), and renal cell carcinoma 11.1% (n=4) respectively.
- The calculated lifetime prevalence (risk) of developing an EPM in the general Maltese population is 19.5% (1 in 5).
- No statistical difference in EPM prevalence was found between the IPMN patient cohort and the Maltese general population (p=0.86).
- Baseline characteristics did not significantly differ between IPMN patients with an associated EPM and those with no EPM.

**CONCLUSIONS**

- There is no rationale for undergoing further extensive radiological investigations searching for an underlying EPM in patients with an incidentally identified IPMN on cross-sectional imaging.

**REFERENCES**

- Cholangiocarcinoma 2.8% (n=1)
- Gastrointestinal Stromal Tumour (GIST) 2.8% (n=1)
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- Gastrointestinal Stromal Tumour (GIST) 2.8% (n=1)
- Appendix Carcinoid 2.8% (n=1)
- Urinary Bladder Transitional Cell Carcinoma 2.8% (n=1)
- Gallbladder Wall Adenocarcinoma 2.8% (n=1)
- Skin Melanoma 2.8% (n=1)
- Glioblastoma Multiforme 2.8% (n=1)
- Ovarian Adenocarcinoma 2.8% (n=1)

**DEMOC-apographics**

- 175 patients with an incidental IPMN on MRI included in study population
- 58.3% female (n=102); 41.7% male (n=73)
- Mean age at incidental imaging: 66.8 years (min: 29; max: 91)
- 88.6% Branch-Duct IPMN (n=155); 9.7% Main-Duct IPMN (n=17); 1.7% Mixed-Type IPMN (n=3)

**EPMs do not occur more frequently in IPMN patients.**

**CONCLUSIONS**

- Percentage of associated extra-pancreatic malignancies in IPMN patient cohort

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- Extra-Pancreatic Malignancies in IPMN patient cohort by ICD-10 code

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