Management of Incidental Pancreatic Cysts - Are we adhering to guidelines?

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Introduction
The prevalence of asymptomatic pancreatic cyst ranges from 2.2% - 13.5%. The majority of these are incidentally diagnosed. Only 31% of these cysts were documented in radiology reports. Neoplasia is increasingly identified in them. Most NHS Trusts do not have robust pathways to manage incidental pancreatic cysts. We reviewed management of incidental pancreatic cysts and adherence to guidelines.

Types of Pancreatic Cysts

- **Pseudocysts**
  - Seen in pancreatitis.
  - Benign in nature with no malignant transformation.

- **Serous Cystadenomas**
  - Usually women in 50s.
  - Mostly asymptomatic.
  - Benign in nature.

- **Intraductal Papillary Mucinous Neoplasms**
  - Most common neoplastic cyst in pancreas.
  - Produces mucin and has risk of malignant transformation.

- **Mucinous Cystic Neoplasms**
  - Typically found in women.
  - They have malignant potentials.

Methodology
Retrospective data was collected across three hospital sites in our Trust between January 2018 to January 2019 when there were no trust guidelines. Reaudit was performed between July 2019 to February 2020 following the introduction of local guidelines which recommend all pancreatic cysts to be discussed in specialist multi-disciplinary team (MDT) meetings.

Results

<table>
<thead>
<tr>
<th>Periods</th>
<th>N</th>
<th>MDT Referrals</th>
<th>No MDT Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>79</td>
<td>42 (53%)</td>
<td>37 (47%)</td>
</tr>
<tr>
<td>Second</td>
<td>28</td>
<td>18 (64%)</td>
<td>10 (36%)</td>
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Implication of COVID-19: 12 months data could not be collected in the second phase due to disruptions in the local services caused by COVID-19. The resulting sample size over nine months is therefore smaller in comparison to the first audit cycle.

A trend of increased MDT referral was observed in the second period by 11% (p=0.3 with Chi square test).

36% of patients were still not referred (Table 1)

During the initial audit, 62% (23/37) of patients in the Non-MDT group had no surveillance scans, potentially missing high-risk patients and 38% of patients (14/37) still underwent surveillance scans from non-GI specialists which could be unnecessary. (Fig.1)

In the second period, 44% of patients underwent surveillance following MDT as compared to 83% prior to guidelines (p= 0.002) (Fig.2)

Discussion

Robust guidelines in place for incidental pancreatic cysts helps identify high risk cysts which warrant future surveillance and appropriate treatment, avoid unnecessary surveillance, thereby releasing radiology capacity.

MDT referral ensures malignant transformations are identified early and reduce morbidity and mortality.

Conclusion

Robust guidelines in place for incidental pancreatic cysts help identify high-risk cysts which warrant future surveillance and appropriate treatment, avoiding unnecessary surveillance, thereby releasing radiology capacity. MDT referral ensures malignant transformations are identified early and reduce morbidity and mortality.

Recommendation

Discussion and dissemination of the new trust guidelines with other relevant non-GI teams will help in the adherence to this pathway and avoid losing high-risk patients in the community.

Re-audit cycle to be performed over 12 months period after one year of implication of the guidelines for more updated and comparable results.

King’s Guidelines: Snapshot

Clinical features that warrant urgent referral to King’s HPB MDT regardless of size & morphology:
- Obstructive jaundice, weight loss.
- Elevated serum 19-9 or CEA.
- Strong family history of pancreatic cancer.
- New onset or worsening diabetes.
- Repeated attacks of pancreatitis.

References