East of England Cancer Alliance

Regional Protocol for the Management of Pancreatic Cystic Lesions

East of England Pancreatic NCG 16th October 2024

1. Introduction:
Pancreatic cystic lesions are common incidental findings following the greater use of cross-sectional imaging. A small proportion of pancreatic cysts have a pre-malignant potential, raising implications for extent of surveillance as well as resource implications given the long duration of follow up. This protocol sets the criteria for referral to the regional MDT and establishes surveillance regimes for resected cysts as well as those managed with observation. MRI is generally considered more sensitive and specific than CT at detecting high risk features such as nodularity within the cyst and should be the first-line modality of cross-sectional imaging, however given resource implications CT could also be considered an acceptable alternative for surveillance.

2. Scope:
This guidance covers any patient within the East of England catchment population with a new or existing diagnosis of a pancreatic cyst on cross-sectional imaging (at least CT or MRI/ MRCP), unless there is clear evidence that this is a pseudocyst following a confirmed episode of pancreatitis. Patients who have a suspected pancreatic cystic lesion on ultrasound will need confirmatory cross-sectional imaging before criteria can be applied to consider whether referral to the MDT would be appropriate.

3. Criteria for referral to the regional HPB MDT (high-risk / worrisome features):

Patients should be referred to the regional MDT if they have ANY of the following features on cross-sectional imaging (either CT or MRI/MRCP):

a) Cyst size ≥3cm
b) Mural nodules of any size noted within the cyst
c) Obstructive jaundice (for cysts present in the head of the pancreas)
d) Thickened or enhancing cyst walls
e) Main pancreatic duct ≥5mm
f) Lymphadenopathy
g) Raised Ca19-9
h) Cyst growth rate ≥ 5mm/year (if cyst was previously demonstrated)

If the imaging reports a pancreatic cyst to be present but does not report any of the above features, then the patient should enter a surveillance programme as outlined in the section below.

4. EUS referral criteria for pancreatic cystic lesions:

Patients will usually be referred for EUS following discussion in the regional HPB MDT. While a cyst size >3cm warrants discussion in the regional MDT, this is no longer necessarily an indication for EUS. EUS is recommended in the following circumstances:

a) To assess equivocal enhancement seen on CT / MRI with CE EUS.

b) To sample associated soft tissue e.g. where there is an associated pancreatic duct calibre change or a solid component in a cystic lesion.

c) To sample cyst fluid for biochemistry where this will change management, providing the lesion is at least 15 mm in diameter. For example, it could be used in a young patient who has a cystic lesion that may be non-mucinous. This is likely to be the case where there is no communication with pancreatic duct, or where walled off necrosis is in the differential diagnosis. Pancreas MRI should be considered prior to EUS to look for main duct communication.

d) Any other scenario where the MDT feels it would change management.

4. Surveillance of pancreatic cystic lesions:

Surveillance of these lesions is only appropriate for patients who are likely to be candidates for major pancreatic surgery should the cyst meet criteria for an operation. Therefore, patients who are PS 2 and above, unfit for surgery or express a preference not to consider surgery, should not undergo surveillance of their cyst.

Surveillance is not recommended for cystic lesions less than 5mm diameter.

Where appropriate, surveillance should be undertaken as follows:

1) Patients who are under 75 years old (and fit for pancreatic surgery):

    a) Enter these patients into a surveillance pathway (see below)
    b) If there are one or more high-risk or worrisome features (*see above criteria for referral to regional HPB MDT),* discuss in the regional MDT
    c) Consider EUS to further characterise in selected patients (*see above EUS referral criteria)*
    d) Offer long interval surveillance in patients not having surgery, using abbreviated protocol MRI at 1 year and then every 2 years
    e) Stop surveillance at 75 years or when unfit for pancreatic surgery in all patients
    f) If the cystic lesion is < 20 mm and stable for 5 years, surveillance should be stopped

2) Patients who are 76 – 85 years old:

   a) Discuss in regional MDT if fit for pancreatic surgery and has one or more high-risk or worrisome features (*see above criteria for referral to regional HPB MDT).*
   b) Do not offer surveillance in this group.

3) Over 85 years old:

   Do not discuss in local or regional MDT. No surveillance required.

Surveillance scans are to be done in the referring hospital, with the team responsible for the patient holding the accountability for requesting scans, checking reports and informing the patient of scan results. If the imaging shows features that meet the criteria for MDT referral at any point during surveillance, the referring team should make the referral to the HPB MDT.

5. Surveillance following resection of an IPMN:

Surveillance depends on the histological findings from the resected specimen:

a) Patients with high grade dysplasia within the resection specimen:

   These patients should have CT thorax/abdomen/pelvis every 6 months for the first 2 years then yearly surveillance for the subsequent 3 years.

b) Patients with main duct intraductal papillary mucinous neoplasm (MD-IPMN) within the resected specimen, without undergoing total pancreatectomy:

   These patients will be discussed in the regional HPB MDT to consider further resection or surveillance of the pancreatic remnant.

c) Patients with low grade dysplasia:

   Surveillance is not required

d) Patients with adenocarcinoma of the pancreas on histology:

   The prognosis in these patients is determined by the adenocarcinoma hence any adjuvant treatment and surveillance should follow surveillance protocols for the resected cancer

Surveillance following resection could be carried out at the local trusts, and referral made to the HPB MDT as required. Lifelong surveillance is only necessary while the patient is fit for further surgery or active treatment and should be stopped when the local team feel that this is no longer the case.