

Pancreatic cancer decision support guidelines

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Details about the development of the guidelines are included in the full manuscript, or in the summary document:

[Click here for a summary of the development of the guidelines](#)

Thompson B, Philcox S, Devereaux B, Metz A, Croagh D, Windsor J, Davaris A, Gupta S, Barlow J, Rhee J, Tagkalidis P, Zimet A, Sharma A, Manocha R, Neale RE. A decision support tool for the detection of pancreatic cancer in general practice: A modified Delphi consensus. *Pancreatology*. 2021;21.

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Pancreatic cancer decision support guidelines: Summary

Tier 1: URGENT INVESTIGATION. Patients presenting with these signs and symptoms should have urgent investigations of the pancreas and/or referral to a specialist.

1. [Pancreatic-type epigastric pain](#)
2. [Jaundice](#)
3. [Steatorrhoea](#)
4. [Weight loss](#), plus any of the following:
 - a. Non-musculoskeletal upper back pain
 - b. Non-specific abdominal pain
 - c. Nausea
 - d. Changed bowel habits
5. [New-onset or pre-existing but newly unstable diabetes mellitus](#), plus any of the following:
 - a. Family history of pancreatic cancer
 - b. History of pancreatitis
 - c. Non-specific abdominal pain
 - d. Non-musculoskeletal upper back pain

Tier 2: TRIAL OF MANAGEMENT. Patients presenting with these signs and symptoms should undergo a trial of management or investigations to eliminate other causes over a limited time period. If these do not result in a definitive diagnosis within the recommended time period, order investigative tests of the pancreas.

6. [Biliary-type pain](#)
7. [New-onset diabetes mellitus](#), aged over 40 years, plus either of the following:
 - a. History of daily smoking within the last 10 years
 - b. History of regularly consuming 3+ alcoholic drinks per day, within the last 10 years
8. [Existing diabetes mellitus that has become unstable](#), aged over 40 years.
9. [Persistent nausea](#)

Plus one of the following risk factors:

 - a. Family history of pancreatic disease
 - b. Personal history of pancreatitis
 - c. History of daily smoking within the last 10 years
 - d. History of regularly consuming 3+ alcoholic drinks per day, within the last 10 years

AND one of the following symptoms:

 - a. Non-musculoskeletal upper back pain
 - b. Persistent, non-specific abdominal pain
10. [Anorexia, early satiety or change in dietary preferences](#), plus any of the following:
 - a. Non-specific abdominal pain
 - b. Family history of pancreatic disease
 - c. Non-musculoskeletal upper back pain

Tier 3: Consider pancreatic disease if 3 or more of the signs, symptoms or risk factors [listed](#) are persistently experienced and other causes are not identified.

Pancreatic cancer decision support guidelines: Details

Tier 1: URGENT INVESTIGATION

Patients presenting with these signs and symptoms should have urgent investigations of the pancreas or immediate referral to a specialist.

1. Pancreatic-type epigastric pain

Pain in the upper abdomen that:

- Radiates to the upper back
- May cause waking from sleep

1. Suggested bloods: lipase, E/LFTs, FBC, & CRP
2. IV contrast CT (preferably pancreatic protocol)
3. Refer to gastroenterologist or surgeon

2. Jaundice

If patient unwell with jaundice, fever and pain →
Refer to hospital urgently

- If patient is well with jaundice alone:
1. Suggested bloods: lipase, E/LFTs, FBC, CRP, INR
 2. Ultrasound of biliary tree
 3. Refer to gastroenterologist or surgeon

3. Steatorrhoea

1. Suggested bloods: lipase, E/LFTs, FBC, CRP, coeliac serology
2. Faecal elastase
3. IV contrast CT (preferably pancreatic protocol)
4. Refer to gastroenterologist or surgeon

4. Weight loss

Unexplained, rapid weight loss, with or without loss of appetite.

Plus one of the following:

- Persistent non-musculoskeletal upper back pain
- Non-specific abdominal pain
- Nausea
- Changed bowel habits

1. Suggested bloods: lipase, E/LFTs, FBC, thyroid, CRP, iron studies, B12, folate, coagulation profile, HbA1c, coeliac serology
2. IV contrast CT abdomen and pelvis
3. Refer to gastroenterologist or surgeon

5. New-onset or pre-existing but newly unstable diabetes mellitus

New-onset, or existing diabetes mellitus that has become unstable, in patients aged 40 years or over, with no other clear explanation for the change in diabetes status (e.g. steroid therapy, non-compliance with medication).

Plus one of the following:

- Family history of pancreatic cancer
- History of pancreatitis
- Persistent non-musculoskeletal upper back pain
- Non-specific abdominal pain

1. Suggested bloods: lipase, E/LFTs, FBC
2. IV contrast CT (preferably pancreatic protocol)
3. Refer to gastroenterologist

Tier 2: TRIAL OF MANAGEMENT

Patients presenting with these signs and symptoms should undergo a trial of management or investigations to eliminate other causes over a limited time period. If these do not result in a definitive diagnosis within the recommended time period, order investigative tests of the pancreas.

6. New biliary-type pain

Pain in the upper right to middle abdomen and that may intensify with ingestion of fat or after a heavy meal.

1. Suggested bloods: lipase, E/LFTs, FBC, & CRP
2. Ultrasound scan

Gallstones evident

Mass, cyst or inconclusive

Refer for management

1. IV contrast abdominal CT (within 2 weeks)
2. Refer to gastroenterologist or surgeon

7. New-onset diabetes mellitus.

New-onset diabetes mellitus, in patients aged 40 years or over, with no clear explanation (e.g. pregnancy, steroid treatment).

Plus one of the following:

- History of regularly consuming 3+ alcoholic drinks per day, within the last 10 years
- History of daily smoking, within the last 10 years

Optimise diabetes management for 6 weeks

DM not adequately controlled

IV contrast CT (preferably pancreatic protocol)

8. Existing diabetes mellitus that has become unstable

Unstable diabetes mellitus in a patient who:

- Is aged 40 years or over;
- Has pre-existing diabetes mellitus that has been stable for at least 12 months;
- Has no clear reason for the change in diabetes status (e.g. non-compliance with medication, steroid medication)

Optimise diabetes management for 6 weeks

DM remains unstable

IV contrast CT (preferably pancreatic protocol)

9. Nausea

Wait no longer than 6 weeks to investigate the pancreas in patients with nausea who are aged 50 or over for which causes such as infection and new medication have been eliminated.

Plus one of the following risk factors:

- Family history of pancreatic disease
- Personal history of pancreatitis
- History of daily smoking, within the last 10 years
- History of regularly consuming 3+ alcoholic drinks per day, within the last 10 years

AND one of the following symptoms:

- Persistent non-musculoskeletal upper back pain
- Persistent, non-specific abdominal pain

Suggested bloods: lipase, E/LFTs, FBC, coeliac serology

If symptoms persist and other causes not identified

IV contrast abdominal CT

10. Anorexia, early satiety, change in dietary preferences

Wait no longer than 6 weeks to investigate the pancreas in patients with persistent anorexia, early satiety, or change in dietary preferences, for which other causes such as psychological/social or change in medication have been eliminated.

Plus one of the following:

- Non-specific abdominal pain
- Family history of pancreatic disease
- Persistent non-musculoskeletal upper back pain

Suggested bloods: lipase, E/LFTs, FBC, coeliac serology

If symptoms persist and other causes not identified

IV contrast abdominal CT

Tier 3: CONSIDER PANCREATIC CANCER IN LIST OF DIFFERENTIAL DIAGNOSES

In patients aged 50 years or over who persistently experience at least two of the signs and symptoms listed below and who have at least one of the risk factors, investigations of the pancreas should be prioritised if other more common causes are not identified.

Sign and symptom (At least two of these)	Risk factors (At least one of these)
Abdominal distension Indigestion Bloating Malaise Diarrhoea Non-specific abdominal pain Non-musculoskeletal back pain Vomiting	History of daily smoking within the last 10 years History of regularly consuming 3+ alcoholic drinks per day, within the last 10 years Stable diabetes (>12 months)