

Reporting standards for chronic pancreatitis at low dose high resolution computed tomography

Learning Objectives:

- 1- Review updated low dose high resolution Computed Tomography of pancreas.
- 2- Review reporting standards of chronic pancreatitis at low dose Computed Tomography.
- 3- Review role of advanced CT techniques such as dual energy CT in chronic pancreatitis.
- 4- Review merits and limitations of Computed Tomography in chronic pancreatitis.
- 5- Review impacts of imaging findings on patient management.

Background:

Chronic pancreatitis is an irreversible fibro-inflammatory disease of the pancreas leading to permanent structural damage that present with triad of abdominal pain, steatorrhea, and diabetes. Early and accurate diagnosis of chronic pancreatitis is important for treatment planning and prognosis as this disorder is associated with mortality rate. Recently low dose high resolution 320 multi-detector Computed Tomography has been used in assessment of pancreatic lesions. Management of patients is often challenging and necessitates a multidisciplinary approach.

CT technique

CT was carried out using a multidetector 16-slice Light-Speed helical scanner (General Electric Healthcare, Milwaukee, WI) with a pancreatic protocol including a nonenhanced scan followed by two phases, pancreatic phase at 35 s and portal venous phase at 65 s, after intravenous injection of 80–100 ml nonionic contrast (iopromide, Ultravist 370) at dose of 1.5 ml/kg with rate of 3 ml/s using an automatic injector followed by saline chase of 20 ml normal saline. Scanning extended from the hepatic dome to the iliac crest in the precontrast and pancreatic phases and to the symphysis pubis in the portal venous phase. Automated dose modulation was applied to reduce the dose with Kv (80–120 ms) and mAs (variable according to the patient), the collimation was $16 \times 1.25 \text{ mm}^2$, the beam pitch was 0.9, and the section thickness/reconstruction interval was 3 mm/3 mm.

Image Findings

Image analysis was done according to the reporting standards of CP. PD diameter was classified into less than 3.5 mm, from 3.5 to 7 mm, and more than 7 mm; PD contour was classified into smooth, mild irregular, and moderately irregular; PD stricture was classified into none or present in the tail, body, and head and neck location; ductal calculi were classified into not present, present, or unclear; pancreatic calcifications were classified into fewer than 7 punctate, 7–49 punctate/fewer than 7 coarse foci, or innumerable (50 or more punctate/7 or more coarse foci); the diameter of the pancreatic body was classified into 21 mm or more, less than 21 mm and more than 14 mm, between 14 and 7 mm, and less than 7 mm; the distribution of findings was classified as 30 % or less, between 30 and 70 %, or 70 % or more.

PD duct caliber

Classified into less than 3.5 m, from 3.5 to 7 mm, and more than 7 mm



less than 3.5mm.



3.5mm to 7mm.



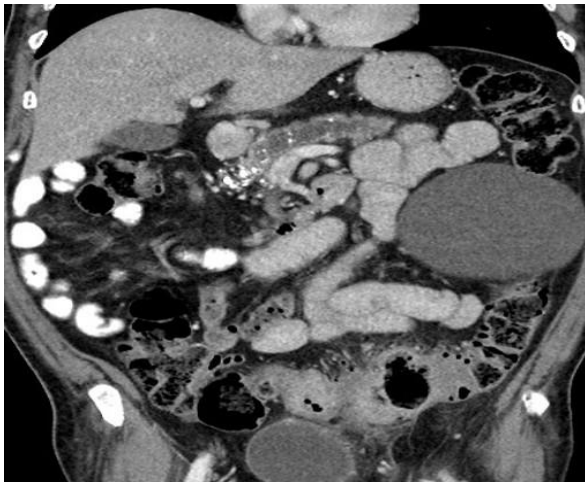
More than 7mm.

PD contour

Classified into smooth, mild irregular, and moderately irregular;



Smooth contour



irregular contour

PD stricture

none or present in the tail, body, and head and neck location;



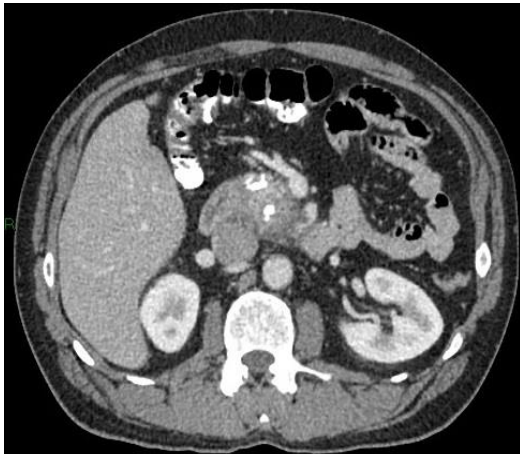
Pancreatic duct stricture at the body

Ductal calculi
not present, present, or unclear

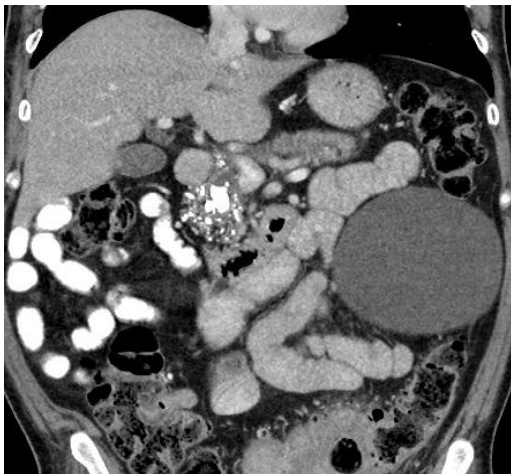


Intra-ductal calculi

Pancreatic calcifications
fewer than 7 punctate, 7–49 punctate/fewer than 7 coarse foci, or innumerable (50 or more punctate/7 or more coarse foci);



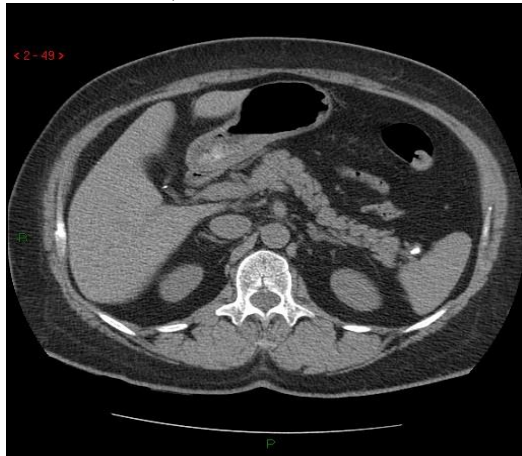
fewer than 7 coarse foci



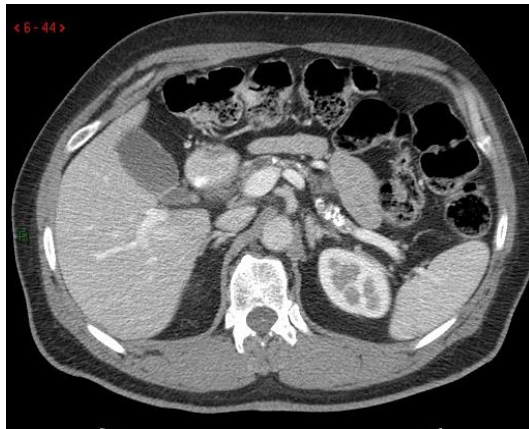
innumerable punctate

The diameter of the pancreatic body

21 mm or more, less than 21 mm and more than 14 mm, between 14 and 7 mm, and less than 7 mm;



more than 14 and less than 21mm.



less than 7mm.

Distribution of findings

30 % or less, between 30 and 70 %, or 70 % or more.



more than 70%

List of your posters:

- #1347
C-01347 Low dose high resolution Computed Tomography in revised Atlanta classification for acute pancreatitis
Type: Educational Exhibit
Status: SUBMITTED
Authors: [E. A. Elfar](#)¹, S. A. Ahamed², A. A. A. Abdel Razek³; ¹Kuwait , Ku/KW, ²KUWAIT/KW, ³Mansoura/EG
[View](#)
- #1537
C-01537 Reporting standards of chronic pancreatitis at low dose high resolution computed tomography.
Type: Educational Exhibit
Status: SUBMITTED
Authors: [E. A. Elfar](#)¹, S. A. Ahamed², A. A. A. Abdel Razek³; ¹Kuwait , Ku/KW, ²KUWAIT/KW, ³Mansoura/EG
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Info

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If you are **not** the submitting author of a poster, it will not be listed.
After submission, posters can **no longer be edited** but can still be opened in *view mode*.
All posters for ECR 2020 must be submitted by **January 13, 2020**.
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