Role of Low Dose high-resolution 320 multi-detector Computed Tomography in acute pancreatitis

Learning Objectives:

- Review technique of low dose high resolution Computed Tomography of pancreas.
- Review the revised Atlanta classification of acute pancreatitis at low dose Computed Tomography.
- Discuss the role of CT in differentiation of interstitial edematous from necrotizing pancreatitis.
- Present the CT findings help to differentiate subtypes of pancreatic and peri-pancreatic fluid collections.
- Review impacts of imaging findings on patient management.

Background:

Acute pancreatitis is an acute inflammatory disorder of the pancreas that can be either interstitial or necrotizing and it's associated with different patterns of fluid collections. Early and accurate diagnosis of the subtypes of acute pancreatitis and associated flouid collectins is important for treatment planning and prognosis.

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.

Imaging findings:

- 1. Review basic background about acute pancreatitis
- 2. Present the revised Atlanta classification of acute pancreatitis.
- 3. Present the CT findings to differentiate interstitial edematous pancreatitis from necrotizing pancreatitis.
- 4. to present the CT findings of acute interstitial edematous pancreatitis collection, either acute peri-pancreatic fluid collection or pseudo-cyst.
- 5. to present subtypes of acute necrotizing pancreatitis either pancreatic parenchyma necrosis alone or peri-pancreatic necrosis alone or combined type.
- 6. to present the CT findings of the acute necrotizing collections, either acute necrotic collection, walled-off necrosis of post-necrosectomy pseudo-cyst.
- 7. These imaging findings help the clinicians and surgeons to select the appropriate management.
- 8. 9-Role of dual energy CT in detection of pancreatic necrosis.
- 9. 10-Role of computed tomography in monitoring the patient after therapy
- 10.11-Meritis and limitation of computed tomography in acute pancreatitis

Conclusion:

CT is an essential modality in diagnosis and subtyping of acute pancreatitis cases that help in management of these patients.

