新光醫療財團法人

新光吳火獅紀念醫院

SHIN KONG WU HO-SU MEMORIAL HOSPITAL

腹部急症之應用

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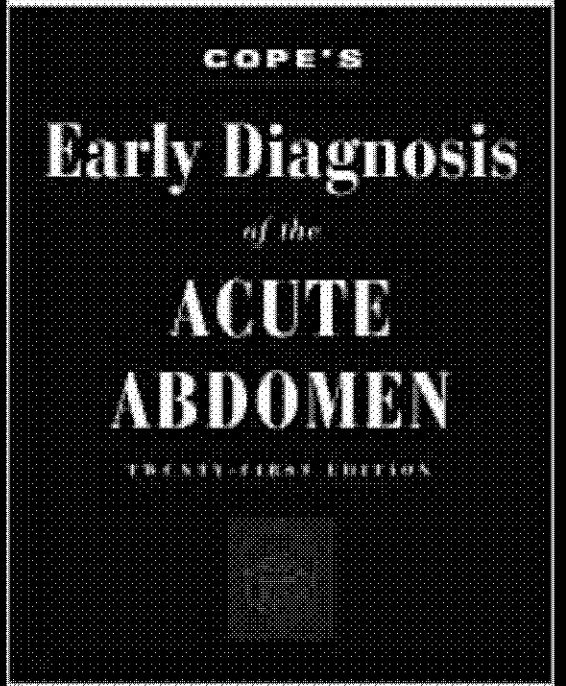


It is only by
thorough history taking and physical examination
that one can propound a diagnosis

Suspected condition	Modality		
	XR	US	CT
Appendicitis	+	++	+++
Perforation	+++	±	++
Pancreatitis	+	++	+++
Diverticulitis	+	±	+++
Cholecystitis	+	+++	++
Abscess	+	++	+++
Intestinal	+++	+	++
Obstruction	+++	+	++
Inflammation	+	±	++
Ischemia	+	±	++
Aortic aneurysm	+	+++	+++
Rupture	+	++	+++
Renal colic	++	++	++
Gynecological	+	+++	++
Ruptured follicle		+++	+
Ectopic pregnancy		+++	+
Tubo-ovarian abscess	+	+++	++

Patterns

Fluid

Gas

Vessels

Hollow organ

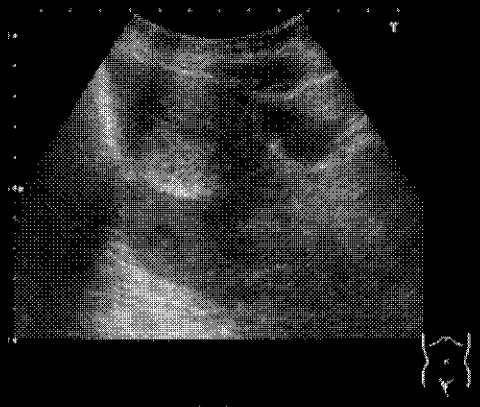
Fluid

Location

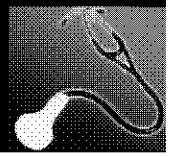
Echogenecity

Content

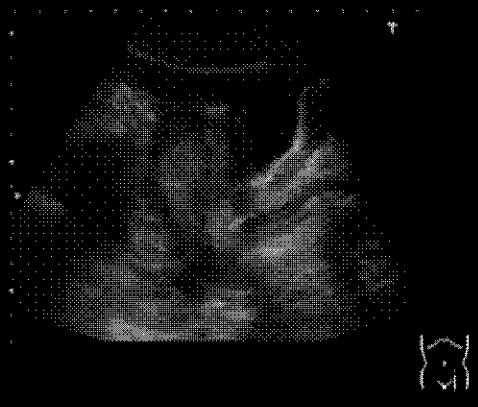
36F with diffuse abdominal pain



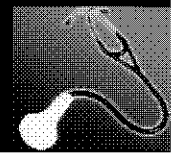
- EUS重點
  - 找游離液體
  - 游離液體不全然是黑色
  - 骨盆處一定要掃二角度
  - 女性永遠想子宮外孕



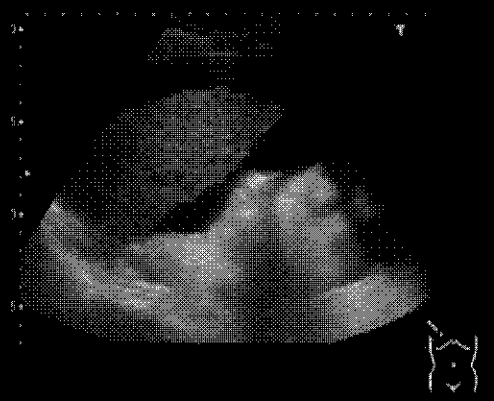
22F with low abdominal pain



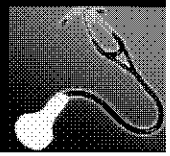
- EUS重點
  - 找游離液體
  - 骨盆處一定要掃二角度
  - 女性永遠想子宮外孕
  - 其次想卵巢破裂



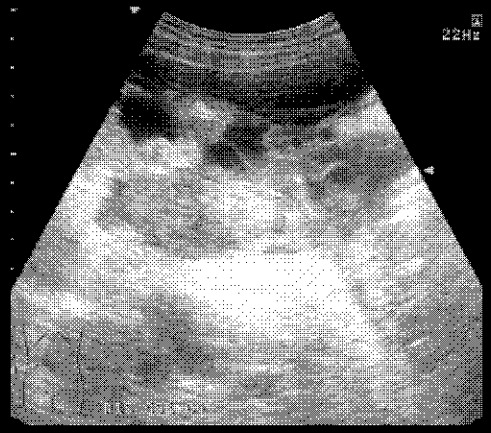
43M, Cirrhosis with ascites



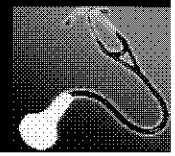
- EUS重點
  - 最好觀察的對象為肝硬化和腹膜透析
  - 藉由腹水可輕易觀察腸子
  - 純黑色的液體出血和感染的機率較低



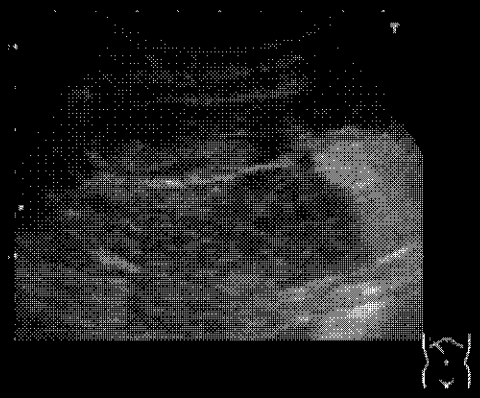
56M with septic shock



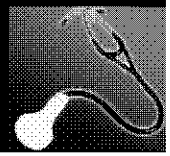
- EUS重點
  - Echogenic fluid可能為血液或膿
  - Fibrin或Septation要優先考慮感染的液體或膿



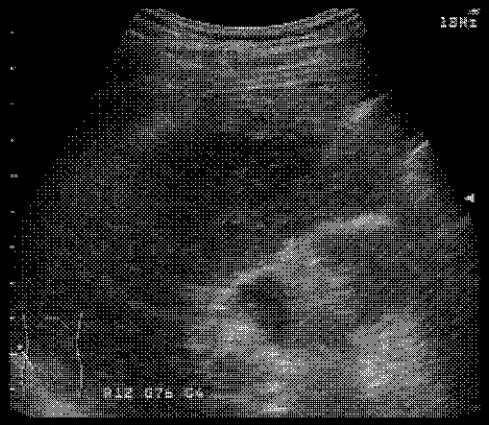
85F with abdominal pain & shock



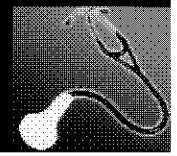
- EUS重點
  - 急性腹痛或休克第一先找有無游離液
  - 排除主動脈瘤
  - 肝腫瘤和游離液要優先考量腫瘤破裂
  - Echogenic fluid和實質器官不容易區分
  - 可協助診斷性穿刺



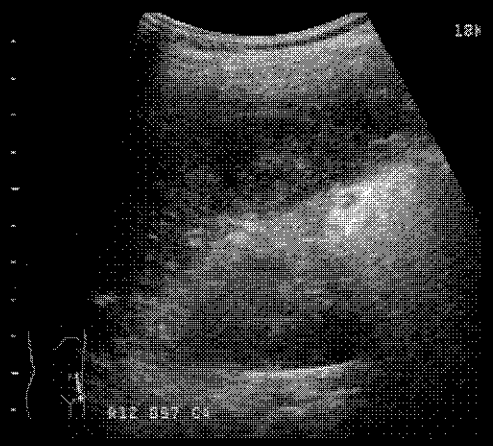
80M with abdominal pain and shock



- EUS重點
  - 急性腹痛或休克第一先找有無游離液
  - 可協助診斷性穿刺
  - Echogenic fluid和實質器官不容易區分
  - Echogenic fluid常出現在破裂器官附近

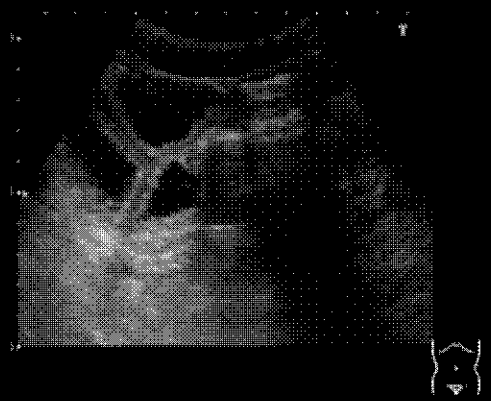


21F, MBA with LUQ pain



- EUS重點
  - 外傷腹痛或休克優先考慮腹內出血
  - Echogenic fluid易誤認
  - Echogenic fluid常出現在破裂器官附近
  - 超音波發現要和臨床『合理』結合
  - 診斷實質器官傷害為次要考量

16m with abdominal pain and vomit

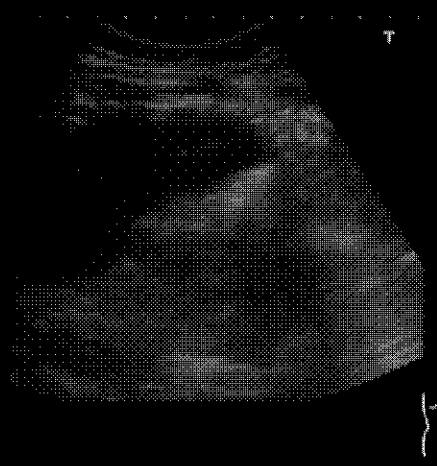


- EUS重點
  - 腹痛合併有游離液者，病程較複雜也較嚴重
  - 注意腸道間的游離液
  - 腸蠕動下降或腸壁變厚都要小心
  - 要區分氣體在腸道內或腸道外

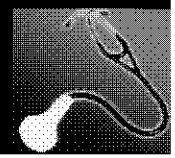
Gas

Echogenecity with comet-tail artifact
Non-dependent location
Associated fluid

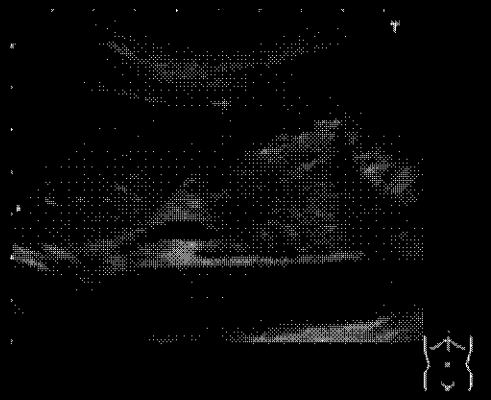
48F with severe abdominal pain



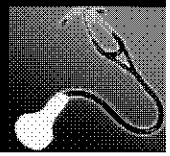
- EUS重點
  - 觀察部位為肝臟表面
  - 平躺姿勢掃描劍突下
  - 左側躺掃描右側橫膈和肝臟間
  - Isolated echogenic air+ comet-tail為重點



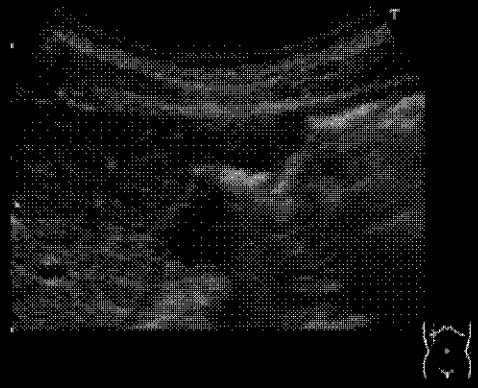
40M with severe abdominal pain



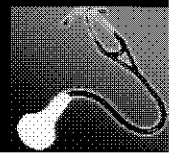
- EUS重點
  - 依臨床懷疑Free air進行擺位和掃描
  - Enhanced peritoneal strip sign (EPSS)
  - 根據台大陳石池主任和王秀伯醫師研究: 超音波掃描pneumoperitoneum的正確性高於X-ray



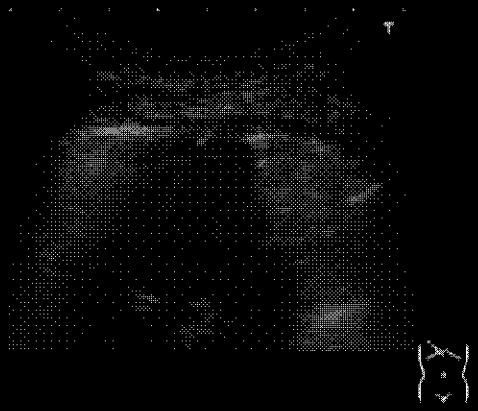
56M with severe abdominal pain



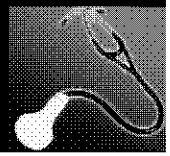
- EUS重點
  - 適時考慮電腦斷層
  - 練習區分腸道內和腸道外氣體
  - 找尋破裂處是可能的
  - 注意胃壁的結構: rugae



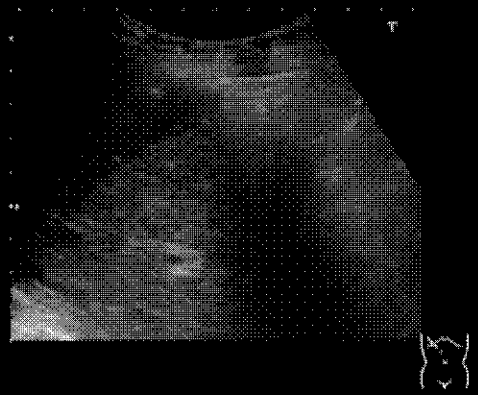
78M with severe abdominal pain



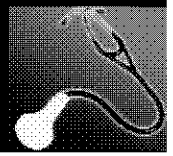
- EUS重點
  - Curtain sign
  - 注意少量腹水和游離氣泡



81F with epigastric pain



- EUS重點
  - Curtain sign
  - Echogenic fluid



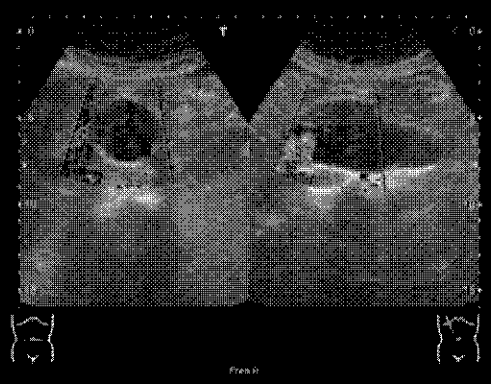
Vessels

Aortic aneurysm

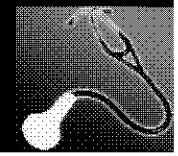
Aortic dissection

SMA problem

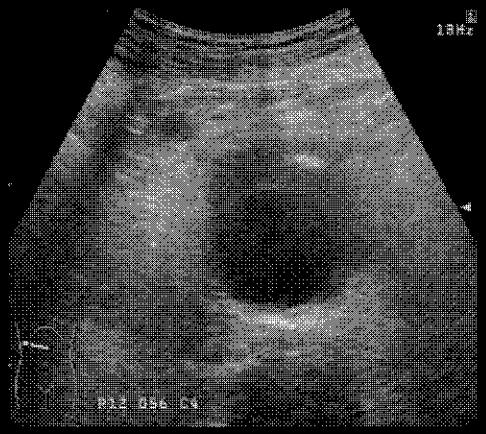
AAA protocol



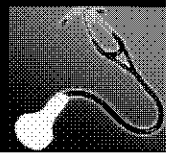
- EUS重點
  - 大於50歲，不明腹痛、腰痛、背痛和鼠蹊部痛
  - 測量主動脈外徑
  - 診斷破裂與否要由有經驗的醫師判斷



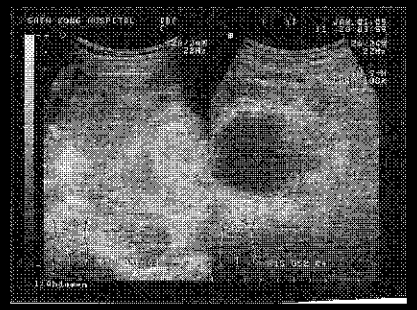
76M with low abdominal pain



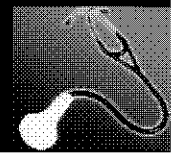
- EUS重點
  - 主動脈測量外徑
  - Mural thrombus
  - Atherosclerosis
  - 主動脈外緣不清晰



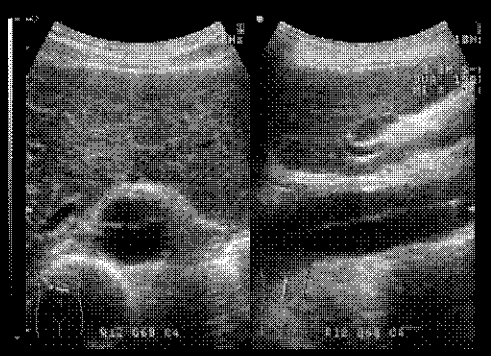
59M with abdominal pain & hematuria



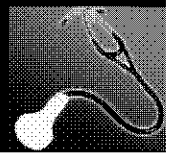
- EUS重點
  - 主動脈要測量最大外徑
  - 主動脈外血腫
  - 後腹腔echogenic hematoma易誤認



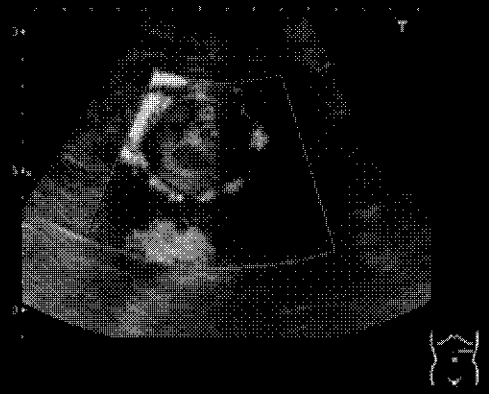
65F, postprandial epigastralgia



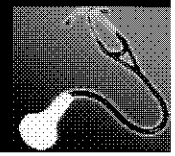
- EUS重點
  - 大於50歲腹痛進行AAA protocol
  - 注意主動脈內是否有異常變化
  - Aortic flap
  - 善用放大功能



45M with frequent abdominal pain



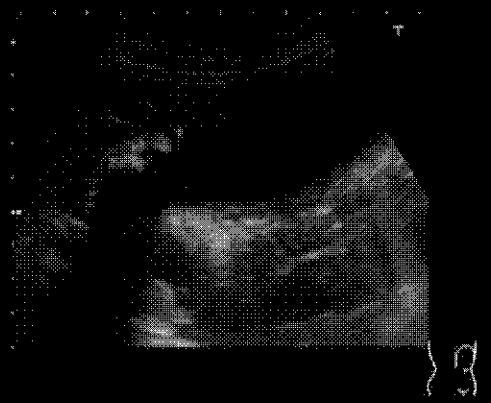
- EUS重點
  - 注意SMA和SMV的關係
  - Whirlpool sign
  - 掃描時頭最好由橫向掃描順血管路徑移動



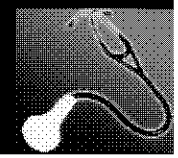
Hollow organ

GB/ Biliary tree
GU tract
Appendicitis
Bowel obstruction

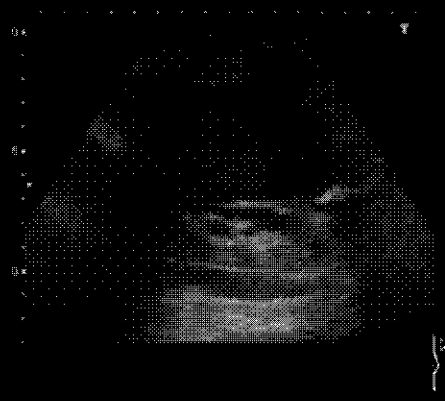
44M with RUQ pain



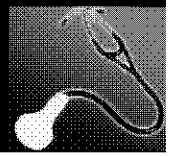
- EUS重點
  - GB stones
  - Distended GB
  - GB wall thickening
  - Peri-GB fluid
  - Echo-Murphy's sign



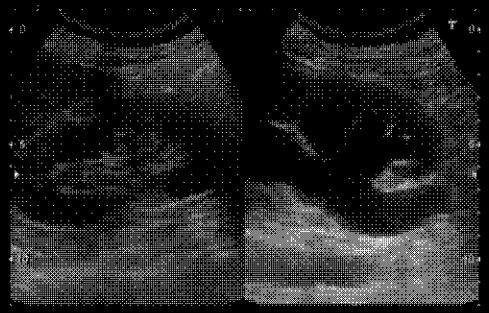
75F with epigastralgia



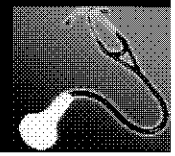
- EUS重點
  - GB stones
  - 由GB引導找CBD
  - 可善用都卜勒功能
  - CBD測量內徑



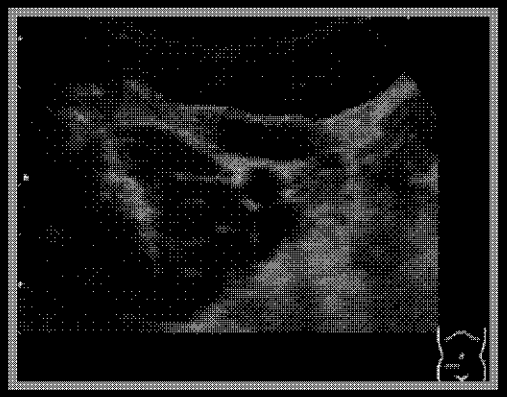
71F with LLQ abdominal pain



- EUS重點
  - Hydronephrosis
  - Hydroureter
  - Renal stones
  - Ureteral stone
  - 最容易造成阻塞處為UPJ, cross iliac vessesls和UVJ

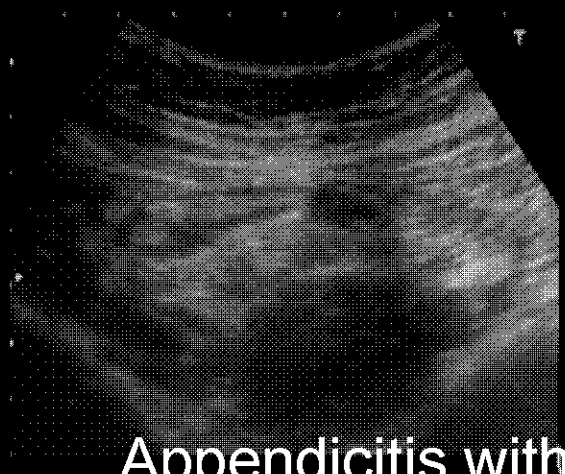


Landmark of Appendix



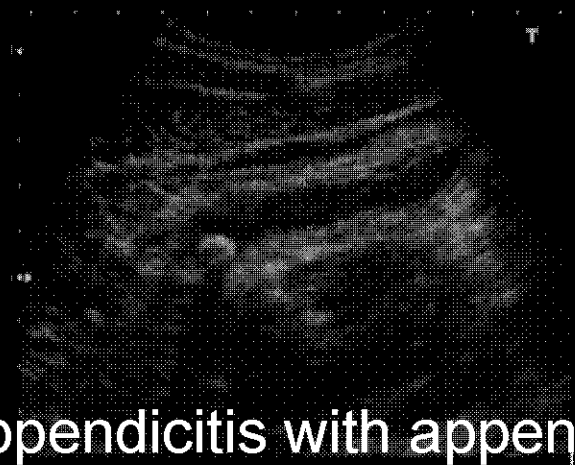
- RLQ
  - Iliac crest
  - Psoas muscle
  - Iliac vessels
  - Cecum & A-colon

Cecum, Ileum and Appendicitis

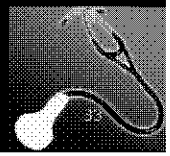


Appendicitis with obvious cecum and ileum

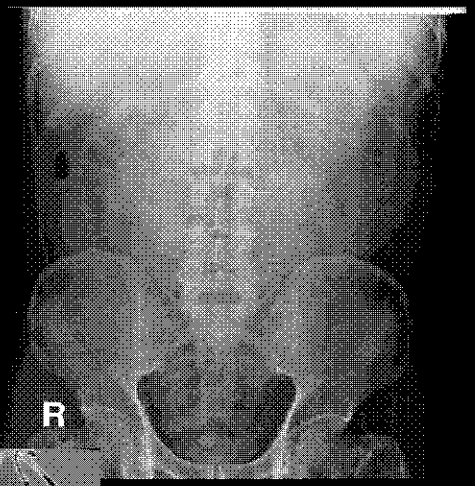
Appendicolith



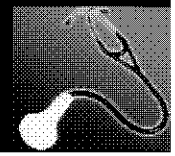
Appendicitis with appendicolith



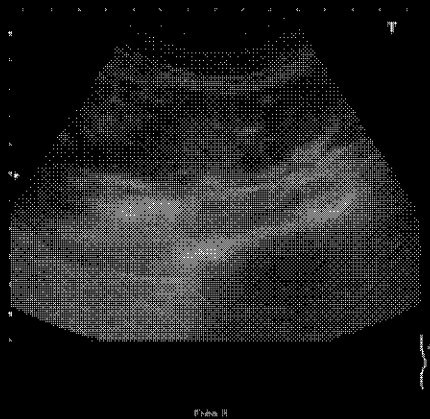
58M with abdominal pain and vomit



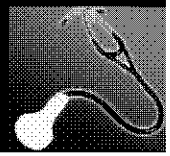
- EUS重點
  - Small bowel dilatation
  - Key board sign
  - Echogenic lesion with acoustic shadow
  - Bisection approximation method



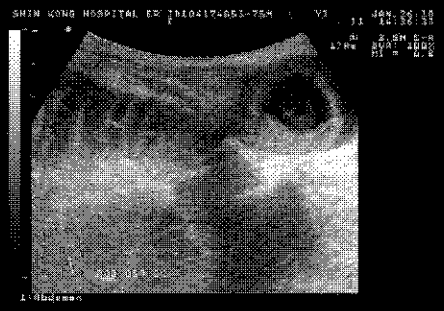
57F with abdominal pain and vomit



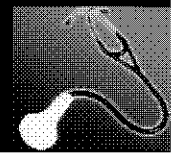
- EUS重點
  - Key board sign
  - Wall thickening
  - Collapsed loops + previous surgery hx
  - 注意腸壁厚度、腸蠕動、腹水



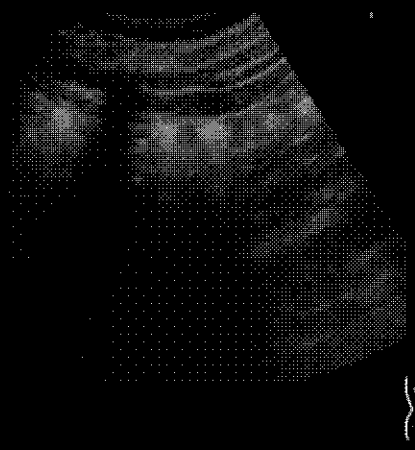
75M with abdominal pain



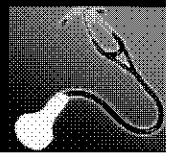
- EUS重點
  - Small bowel dilatation
  - Key board sign
  - Incarcerated loop



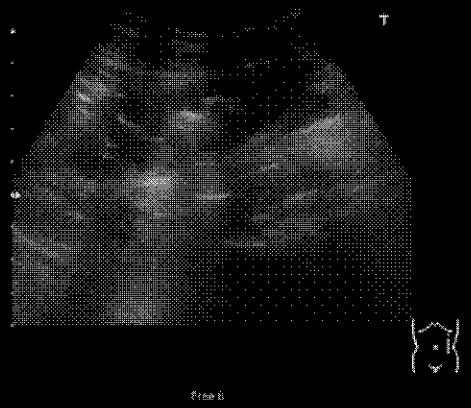
結腸掃描



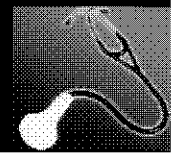
- EUS重點
  - 以橫向掃描開始
  - 沿雙側Psoas muscle line
  - 以縱向掃描確認結腸
  - 認Haustration或竹節形態
  - A/D起始，往T, S, Cecum延伸掃描



40F with severe low abdominal pain



- EUS重點
  - D & S colon wall thickening
  - Ascites
  - 由固定結腸開始掃描



Take Home Message

辨識Patterns

Fluid

Gas

Vessels

Hollow organ

謝謝聆聽

歡迎指教及給予回饋

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