



Basic Data

- Birthday : 1951-07-02
- Gender : Female
- Admission date : 2004-06-28



Chief Complaint

- A protruding mass over RLQ abdomen for many years.

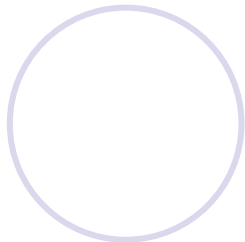
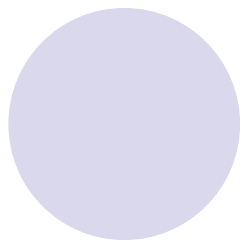
Present Illness & Past History

- Pseudomyxoma peritonei s/p laparotomy and debulking of adhesion at Chung Shin Municipality hospital on 2003-08-26.
- CEA : 11.93, CA199 : 102.7 at our OPD for cancer follow up on 2004-06-17.
- DM for 1 ~ 2 years under regular control.
- HTN for 1 ~ 2 years under regular control.

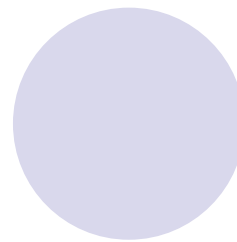
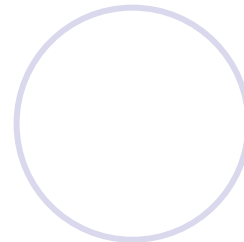
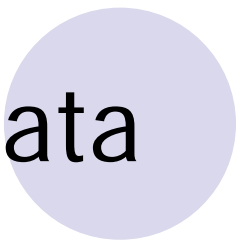


Review of systems & PE

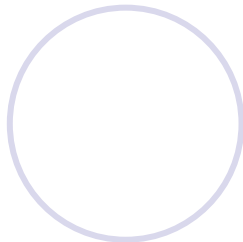
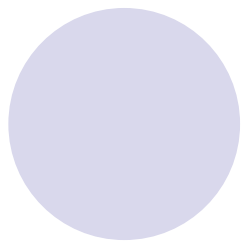
- Review of systems : no specific findings
- Physical examination :
 - Abdomen : 4x4 fixed palpable mass



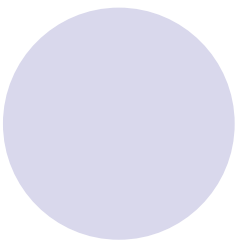
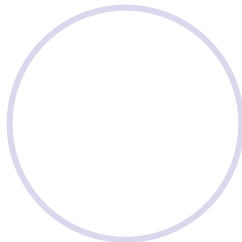
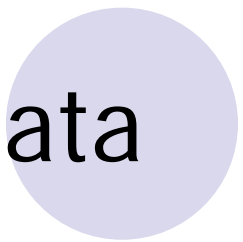
Lab Data



採樣時間	2004-06-17
CEA (< 4.6 ng/ml)	11.93
CA199 (< 37 U/ml)	102.70



Lab Data



檢驗日期	2004-06-28
WBC	3600/uL
RBC	3.17 (10 ⁶ /uL)
Hb	10.6 g/dL
Hct	33%
MCV	104.1 fL

Image Findings-CT pre-contrast



Image Findings-CT post-contrast





Image Findings-Conclusion

- Multiple non-enhanced intraperitoneal masses (HU : 22~25)
- Bowel wall thickening and folds swelling
- Impression : Pseudomyxoma peritonei



Image Findings-D/D

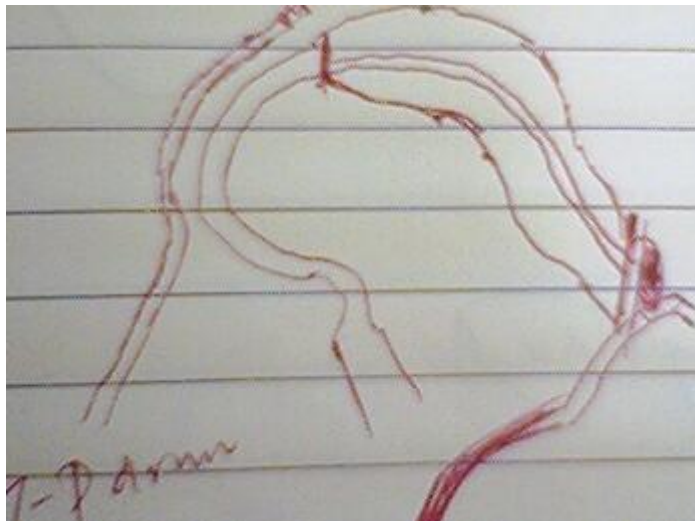
- Ascites.
- Sclerosing peritonitis.
- Intrapерitoneal abscess.
- Retroperitoneal lymphadenopathy.



Recurrent pseudomyxoma peritonei

Operation Findings

- 2004-07-02
 - R't hemicolectomy
 - Hartmann's procedure
 - Debulking of tumor

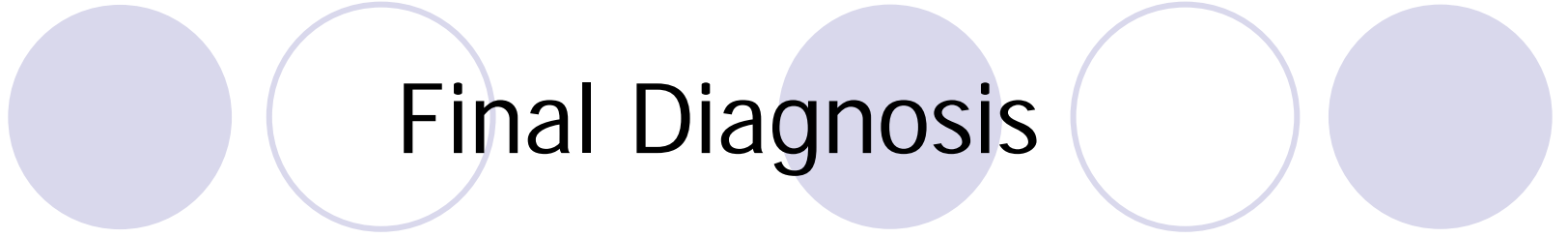


Pathological Findings-Grossly

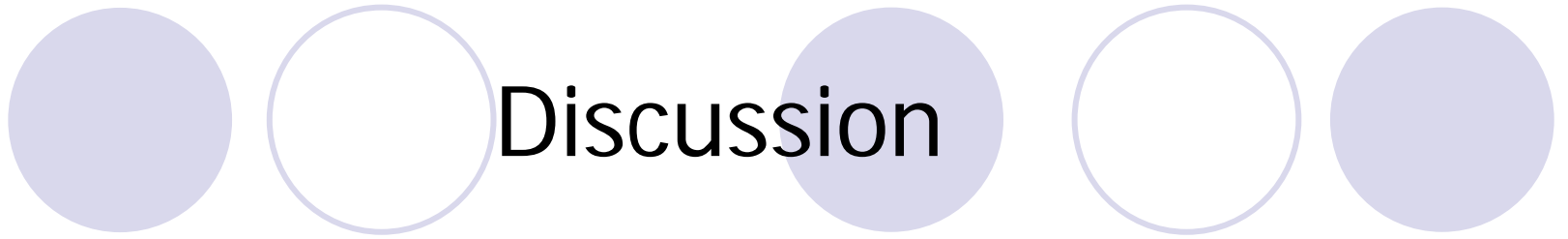
- R't hemicolectomy
 - Marked fibrous adhesion and mucinous tumor involving on the serosa and the omentum are noted.
- Hartmann's procedure
 - The outer surface of the colon also shows marked mucinous tumor coating and fibrous adhesion.
- Debulking
 - Mucinous substance admixed with adipose tissue
- All the tumor is limited to serosa and subserosal areas.
- Impression : Pseudomyxoma peritonei

Pathological Findings-Microscopically

- Large mucin pools
- Only a few mucin pools have an epithelial lining
- Some mucin-producing cells are arranged in glands, nests, or ribbons.
- Benign in appearance
- No invasive components
- Frozen diagnosis : Pseudomyxoma Peritonei



Recurrent Pseudomyxoma Peritonei



Pseudomyxoma Peritonei



Introduction

- Pseudomyxoma Peritonei is a slowly progressive disease that produces extensive mucus accumulation within the abdomen and pelvis.



Symptoms & Signs

- Gradual increase in abdominal girth.
- The increase of intraperitoneal pressure prevents the patient from eating normally.
- Increase in body weight.

Histological classification of mucinous lesions

- DPAM-disseminated peritoneal adenomucinosis
- PMCA-peritoneal mucinous carcinomatosis
- Hybrid tumor

● From : Mod pathol 2001;14:664-671 Abstract quote



- MUC2-expressing goblet cell

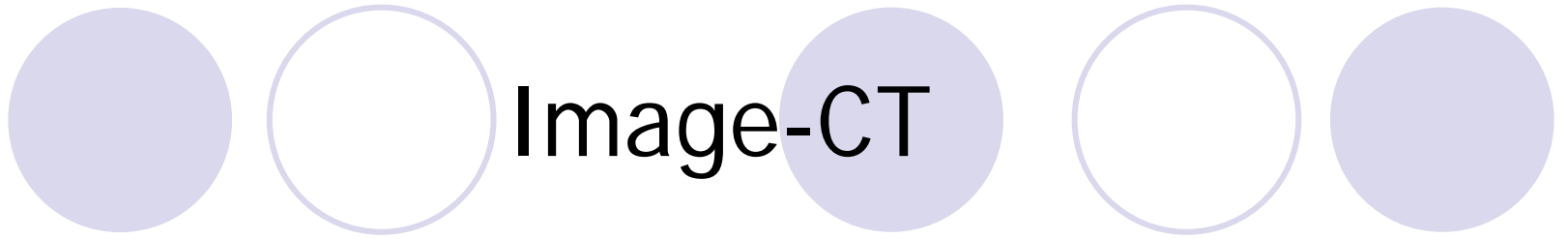
- From : Am J Pathol 2002 Aug;161(2):551-64 Abstract quote



Tumor Markers

- For diagnosis and follow-up
- CEA (75%) & CA199 (58%)
- CA199 was shown to be a more useful tumor marker than CEA for follow-up.

- From : Ann Surg Oncol. 2002 Dec;9(10):961-7. Abstract quote



- Multiple low-attenuation masses within the peritoneal cavity
- Scalloping of the liver margin
- Calcifications

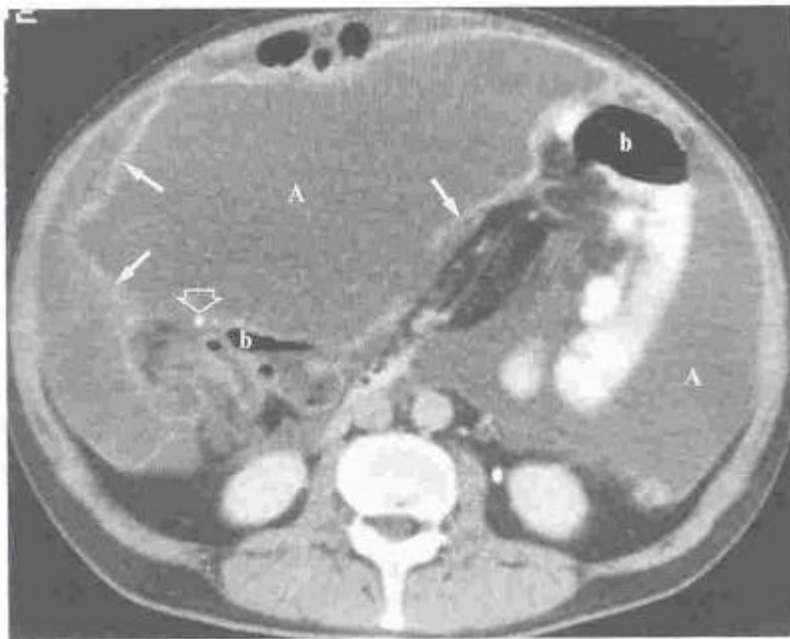


Figure 26.7. Pseudomyxoma Peritonei. A CT scan of a 65-year-old male with a ruptured appendiceal mucocele demonstrates copious ascites (*a*) with prominent septations (*closed arrows*) and mass effect displacing bowel loops (*b*). Punctate calcifications (*open arrow*) are also present on peritoneal surfaces.

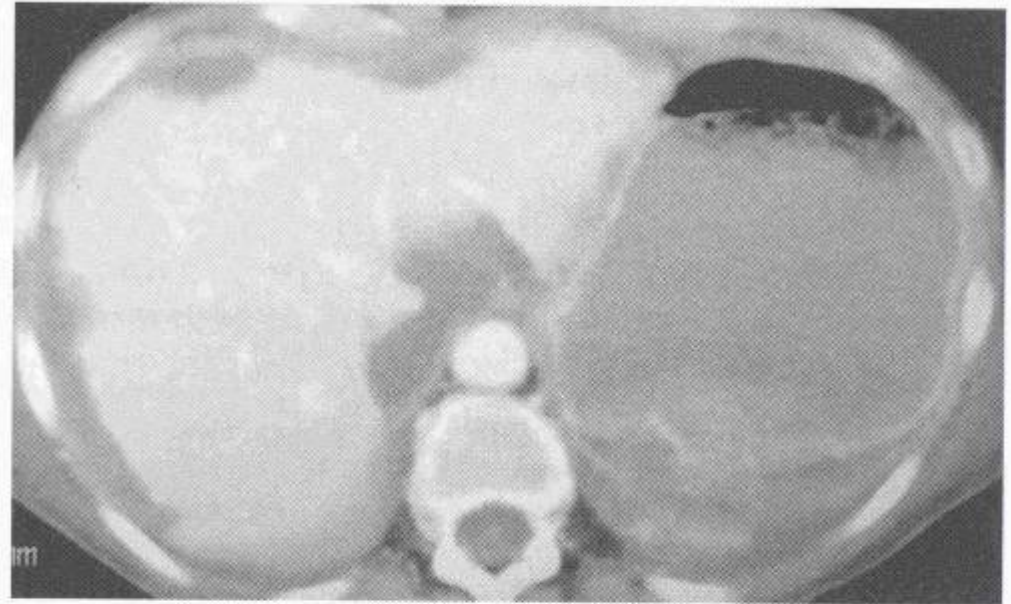
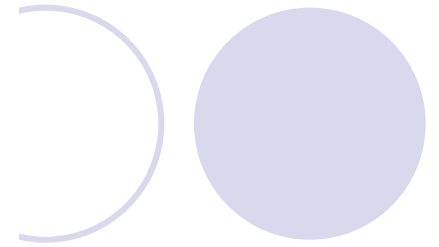
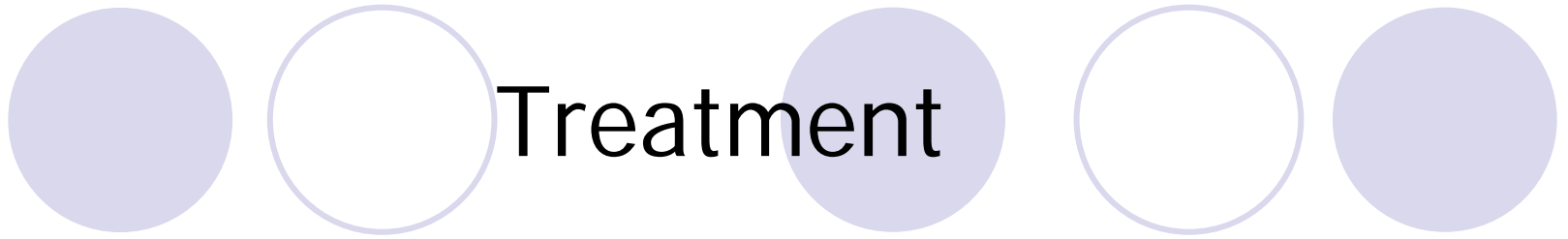
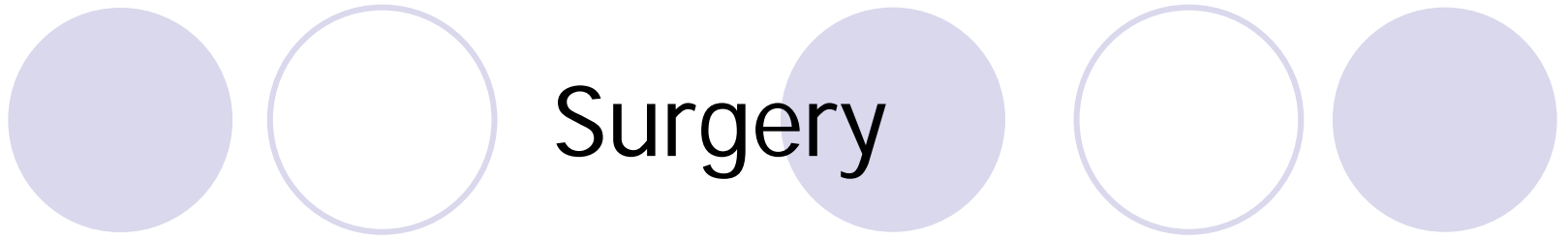


Fig. 20.40 CT reveals the liver scalloping typical of pseudomyxoma.

- <http://www.surgicaloncology.com/atct.ntm>



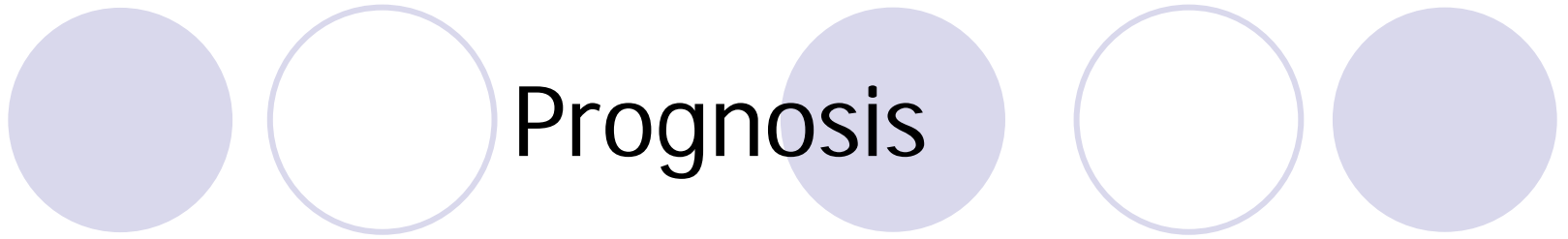
- Watch and wait
 - Monitor the situation closely
- **Surgery**
- Systemic chemotherapy
 - The evidence for the use of systemic chemotherapy in the management of pseudomyxoma peritonei has yet to be established



- Debulking
 - Traditional surgical approach
 - High recurrent rate
- Cytoreductive surgery plus peri-operative chemotherapy(HIPEC)
 - Aggressive removal or destruction of all visible tumors
 - After cytoreduction, chemotherapy is administered directly into the peritoneal cavity.

Post-operative Mortality & Morbidity

- Mortality rates of complete cytoreduction : 3~5%
 - Main complication : lung infections and heart failure
 - Other complications : clots in main leg vein
- Significant morbidity : 30%
 - 20% of patients require further surgery
 - 20% of patients need a stoma
 - Leakage of anastomosis



- Prognostic factor for survival

- Completeness of cytoreduction ($P < 0.0001$)
- Histopathological character ($P < 0.001$)
- Extent of previous surgical interventions ($P = 0.001$)

- From : Eur J Surg Oncol 2001 Apr;27(3):239-43 Abstract quote



Prognosis

Survival rates	5 years	10 years
DPAM	75%	68%
PMCA-I/D	50%	21%
PMCA	14%	3%

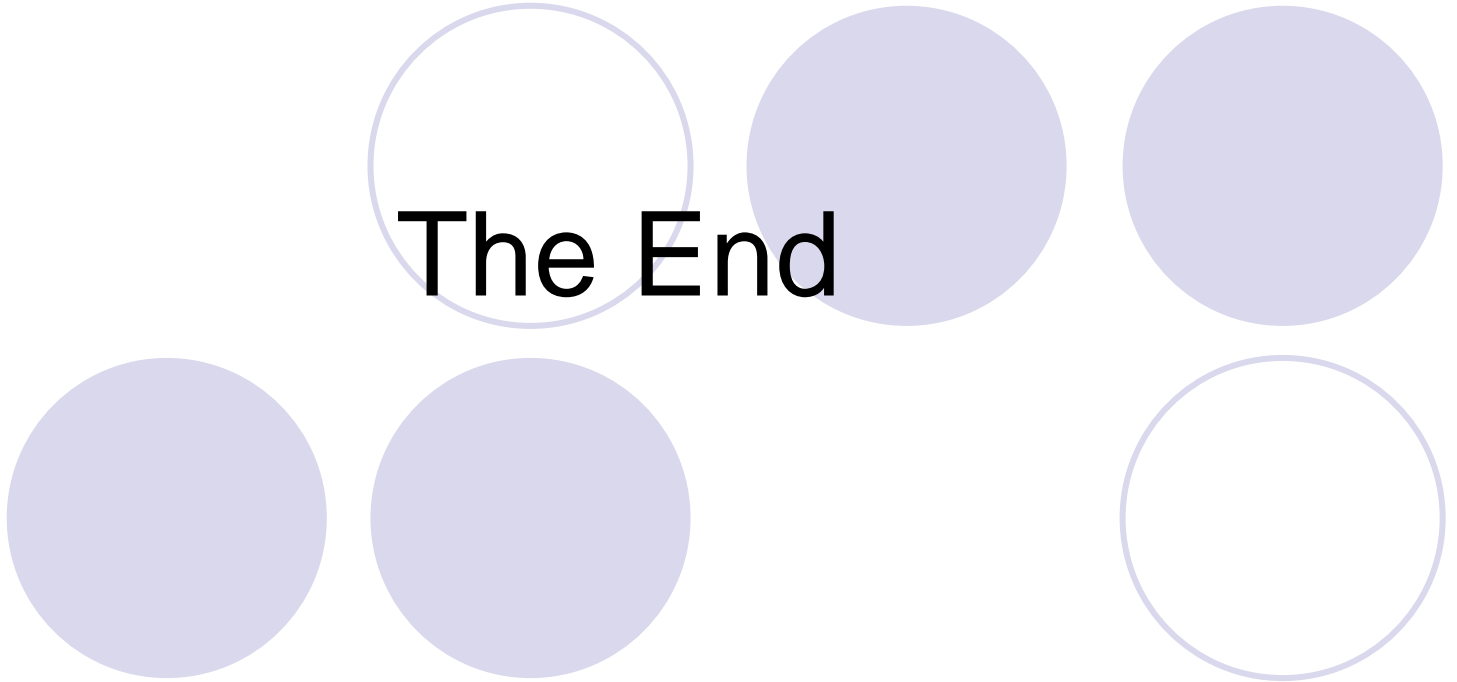
- From : Cancer 2001 Jul 1;92(1):85-91 Abstract quote

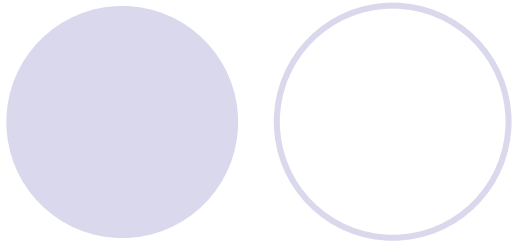


Prognosis

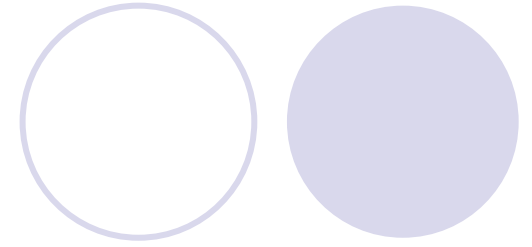
- From : Mod Pathol 2001;14:164-171 Abstract quote
- Unsuccessful second-look surgery is often related to an inaccurate initial histologic classification of appendiceal mucinous tumor.
- Assessment of tumor **histology** can predict the outcome if a uniform surgical treatment is used in patients

The End

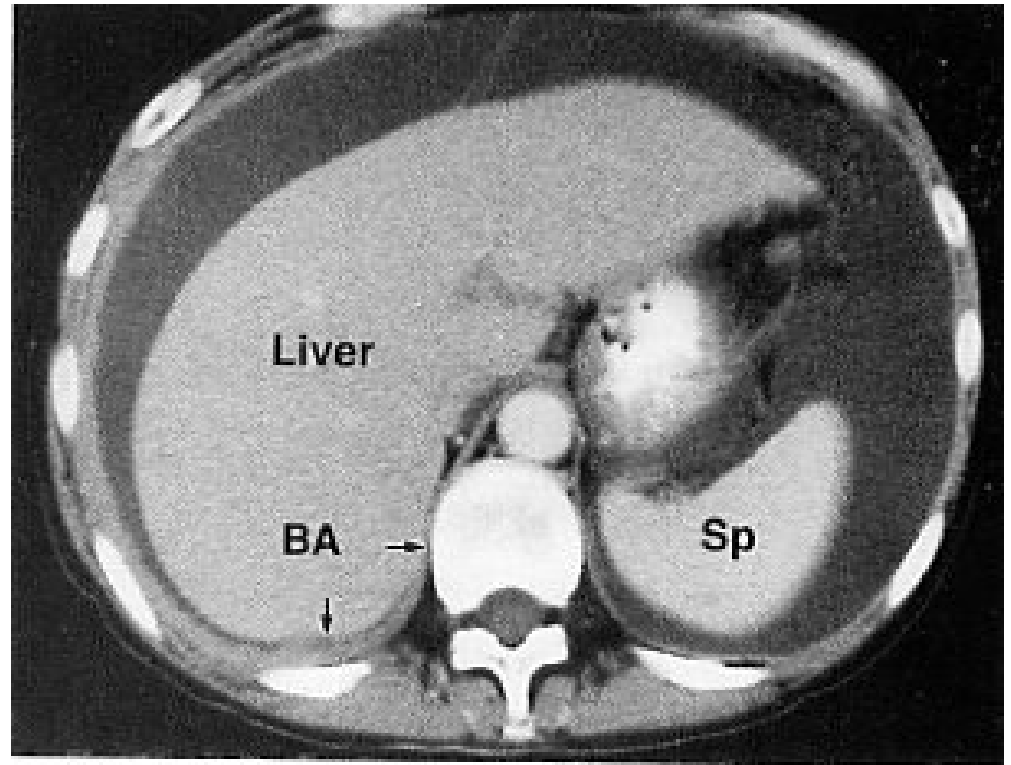





Ascites

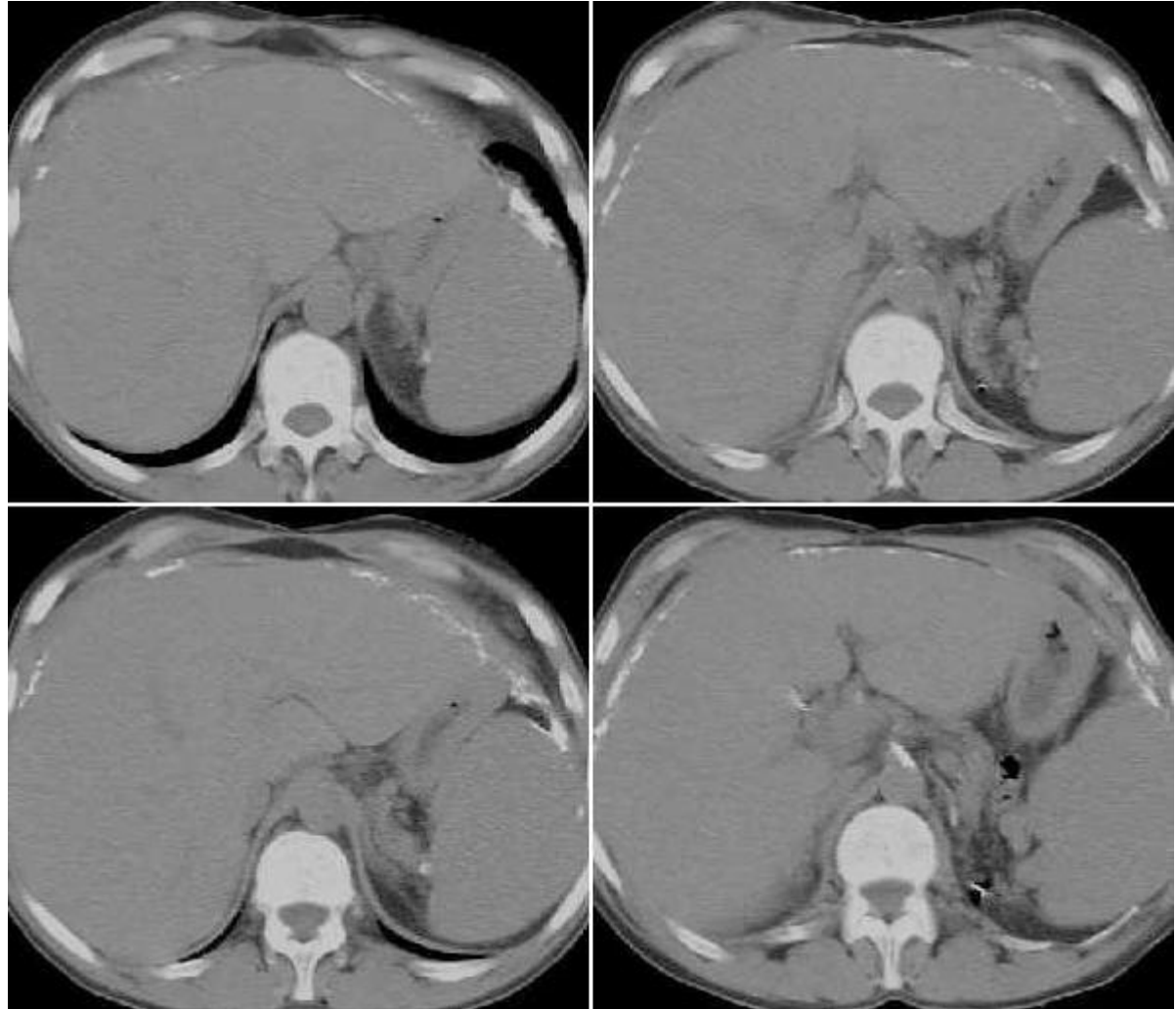


- Low density fluid accumulation
- Common sites :
 - Douglas pouch
 - Morrison's pouch
 - Paracolic gutter
- Retroperitoneal free
- .



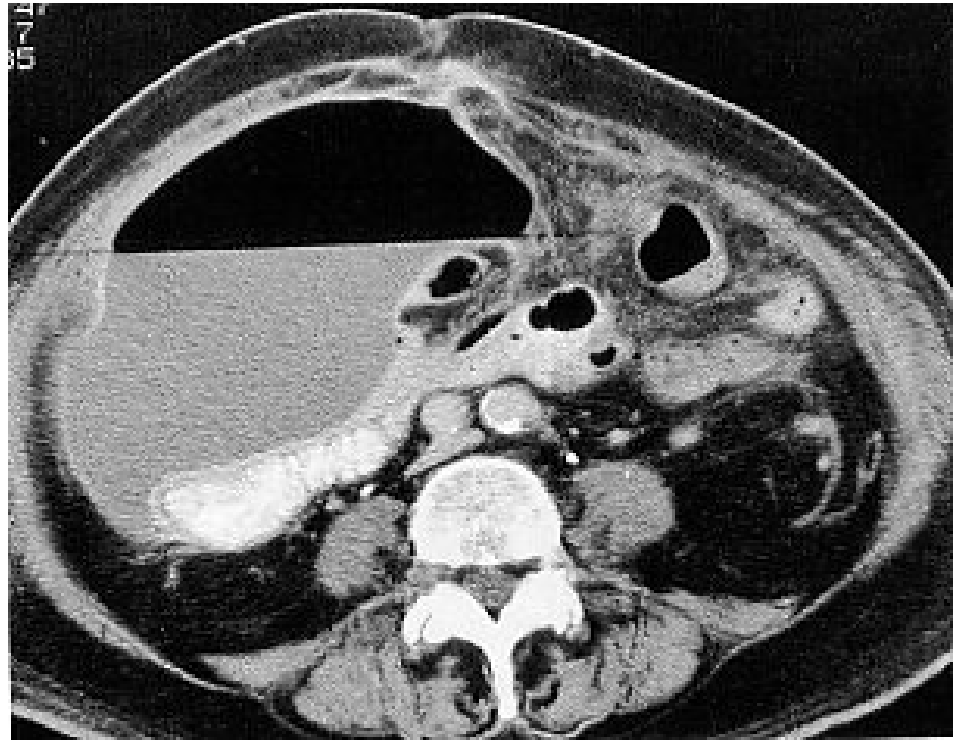
Sclerosing Peritonitis

- Adhesion
- Calcifications
- 



Intraperitoneal Abscess

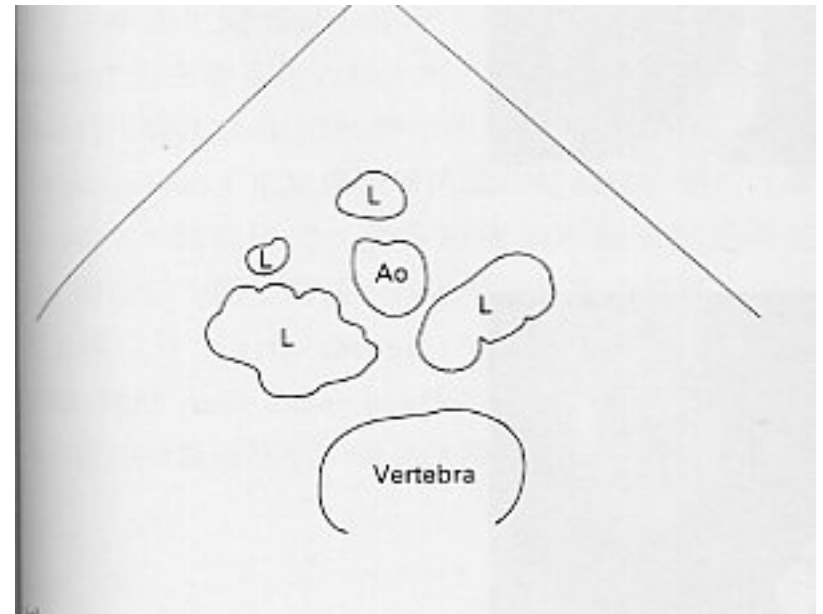
- Air-fluid level
- Thin enhanced wall
- :



Retroperitoneal Lymphadenopathy



- Over lymph node chain
- $\dot{=}$





Strips of mucinous epithelium with minimal cytologic atypia are found associated with pools of mucin and fibrous tissue. (H&E). *Ronnett BM, Schmookler BM, Sugarbaker PH, Kurman RJ: Pseudomyxoma peritonei: New concepts in diagnosis, origin, nomenclature, and relationship to mucinous borderline (low malignant potential) tumors of the ovary. In: Fechner RE, Rosen PP (Eds): Anatomic Pathology 1997 ASCP Press, Chicago, IL, 1997.*