

Patient Data

A decorative graphic consisting of two overlapping circles on the left and three separate circles on the right. The circles are light purple with a thin white outline. The first circle on the left is solid purple, while the second is hollow. The three circles on the right are also solid purple.

- Name: 陳XX
- Gender: female
- Age: 53y/o
- Marital Status: Married



Chief Complaint

- Epigastralgia for one month

Present Illness(1)

- She had chronic dry cough for half year
- She went to 亞東 hospital and was admitted for 10 days in March for left pleural effusion.
- The thoracocentesis showed no confirmed diagnosis and no malignancy.

Present Illness(2)

- The dry cough improved afterwards, but she got fever and epigastralgia during this time.
- 2 weeks ago, sharp epigastralgia associated anorexia happened. (epigastric area; radiated to back, peri-umbilical, and supra-pubic area)

Present Illness(3)

- Cough with bloody sputum
- Body weight loss for 4 kg
- She visited our GI OPD on April, 11th for second opinion.
- The abdominal sono showed an isoechoic mass at pancreatic body with arterial vessels enhancement.

Present Illness (4)



- The CT revealed heterogenous hypodense mass, arising from pancreatic body and head.
- Multiple metastatic lymphadenopathy at paravaval and paraaortic region.
- Minimal pleural effusion at left side.

Lab data



- April 13th:

CEA (血液) [<4.6 ng/ml]	2.49
CA199 (血液) [<37 U/ml]	12.13

- April 17th:

RBC($4.2\sim 6.1 \times 10^6$ /uL): 3.27

Hct($37\sim 52\%$): 31.0

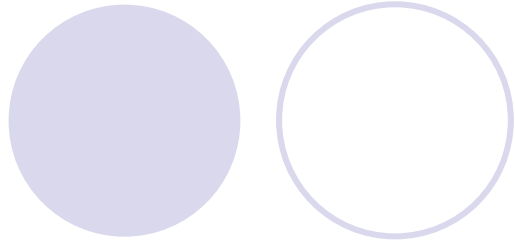
Neutro($40\sim 74\%$): 78.7

CRP($0.0\sim 0.8$ mg/dl): 1.5

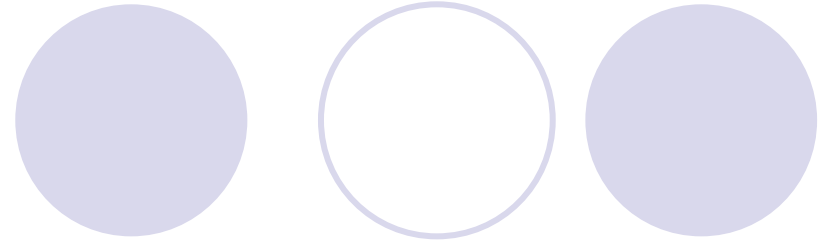
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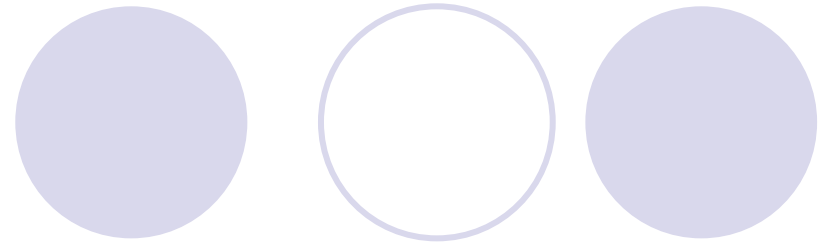
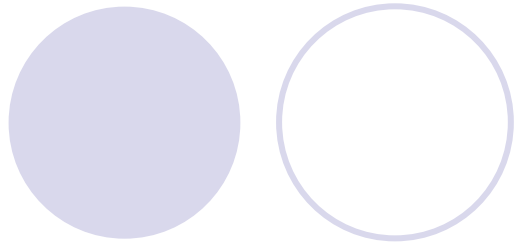
- X-ray:
 1. Faint consolidation
 2. Cardiomegaly with tortuous aortic knob.
 3. Blunting of left CP angle(minimal pleural effusion).





Lateral view

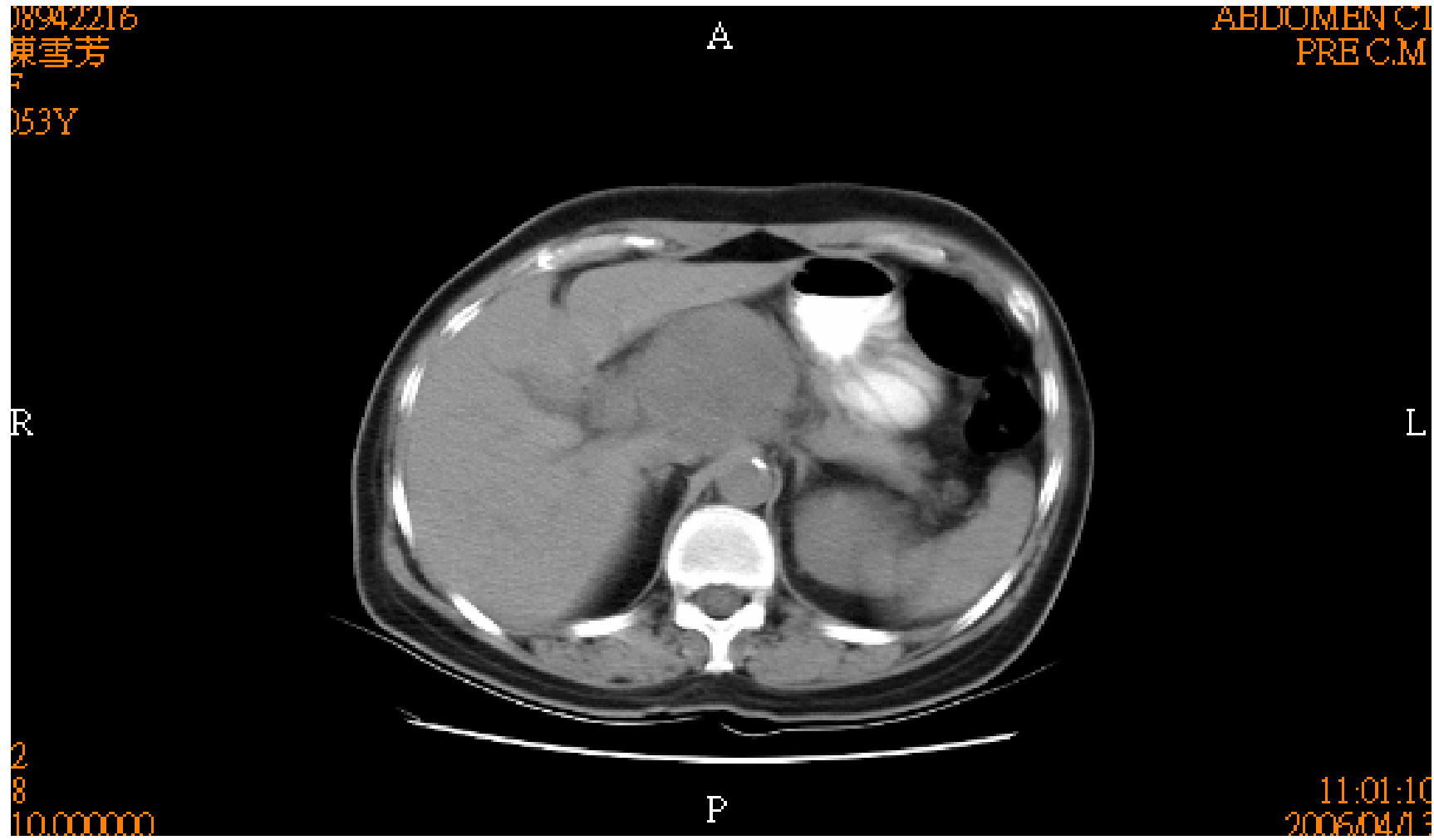
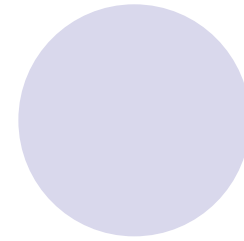
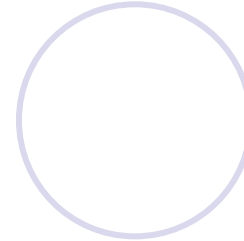
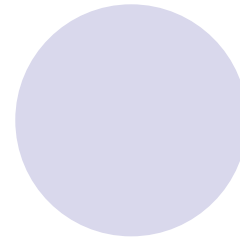
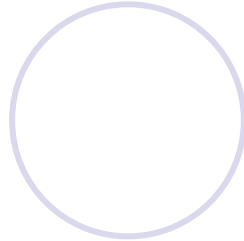
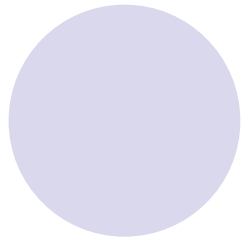


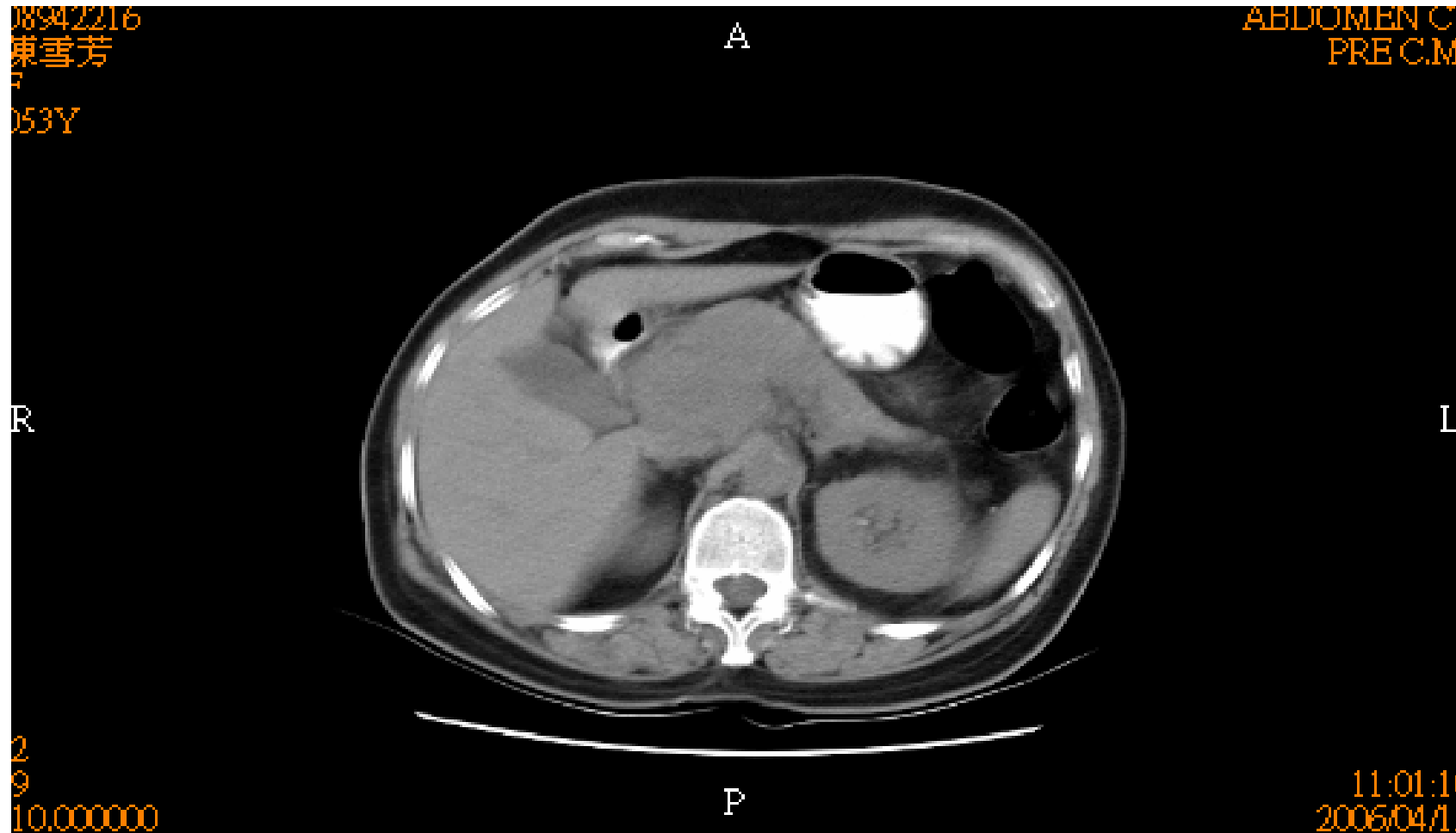
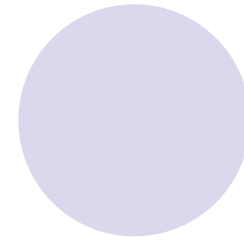
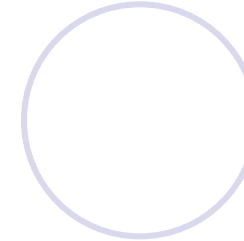
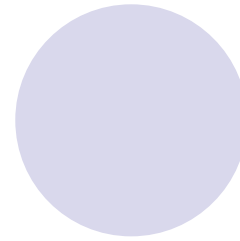
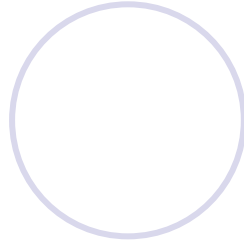
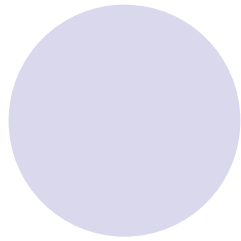


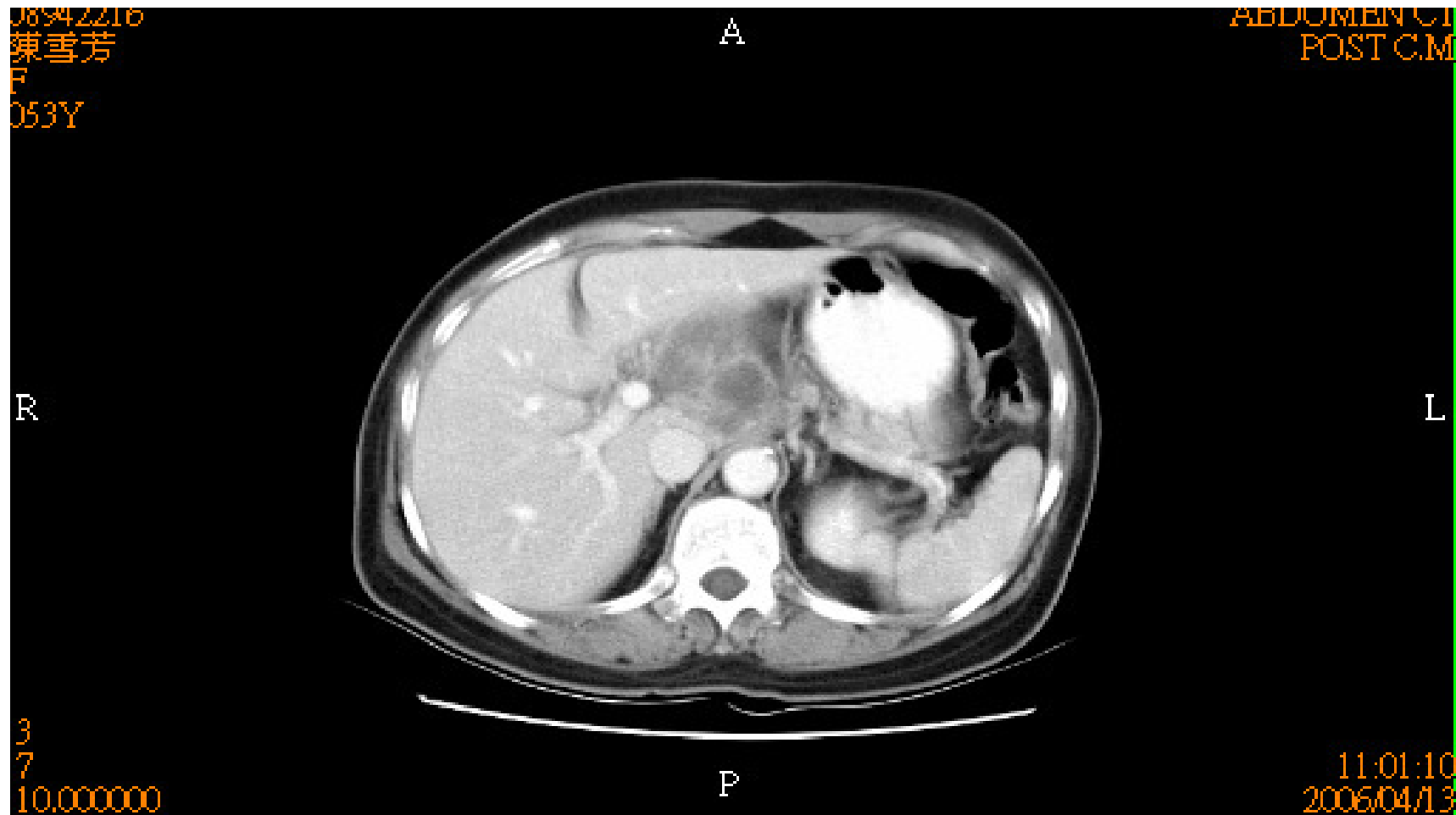
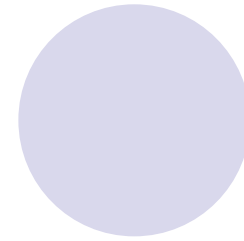
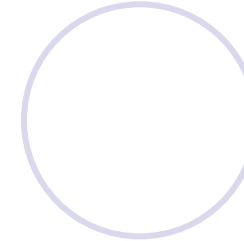
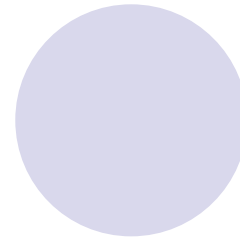
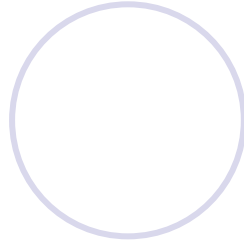
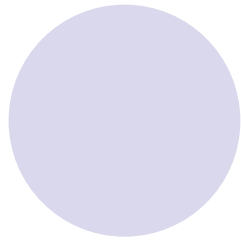
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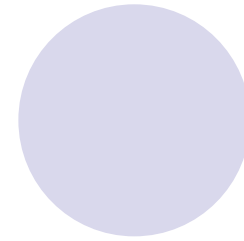
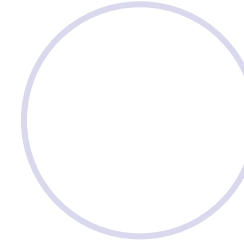
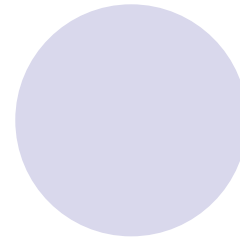
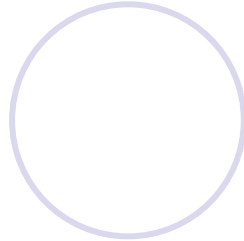
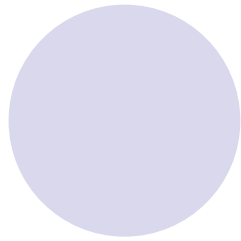
1. Radiopaque densities over right L4 paraspinal region
2. Non-specific bowel gas pattern.
3. Fecal retention in colon.

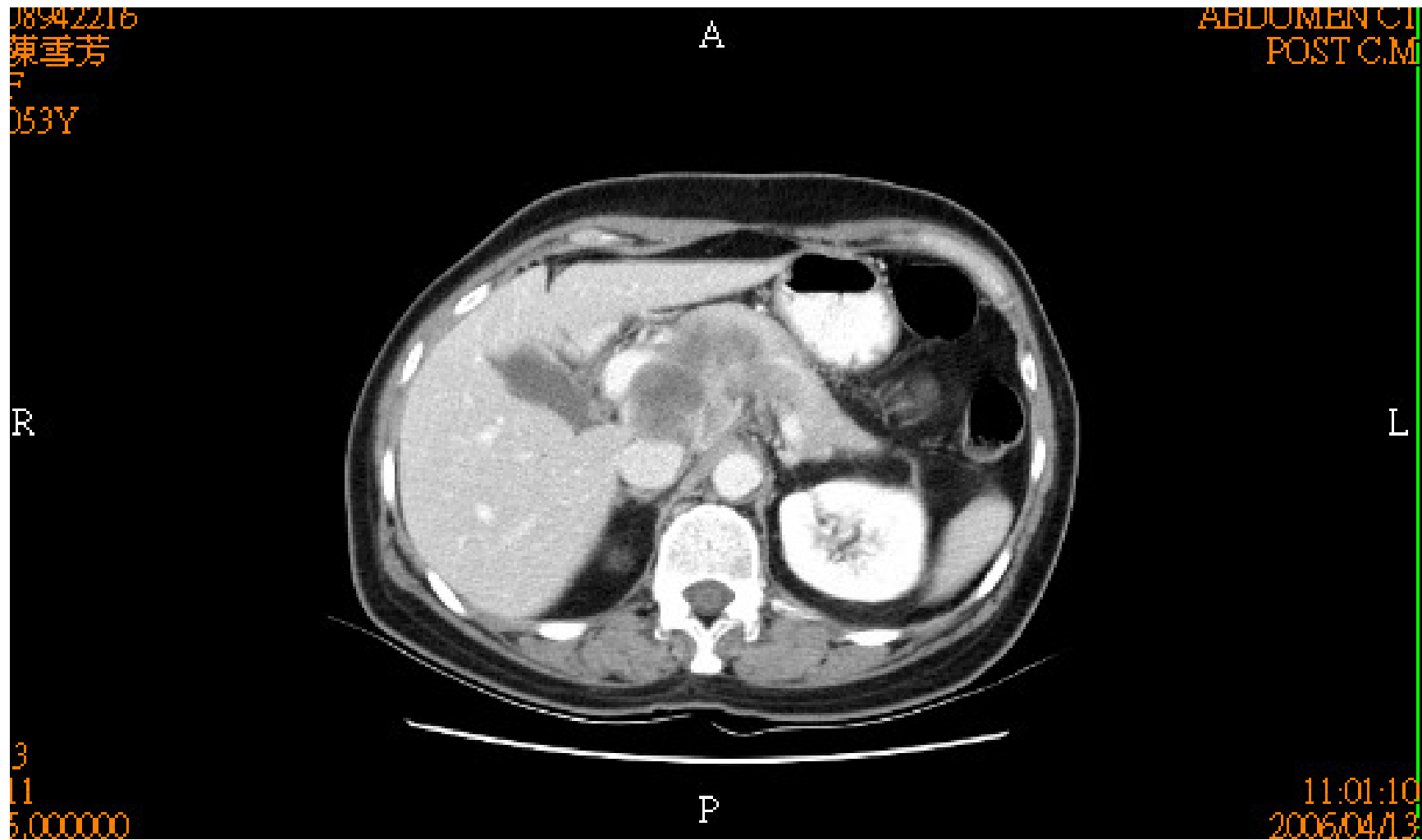
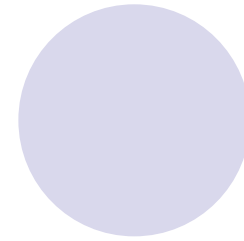
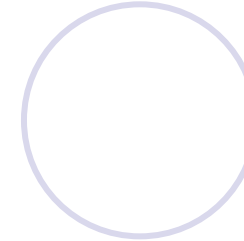
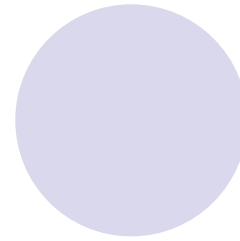
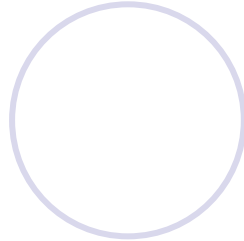
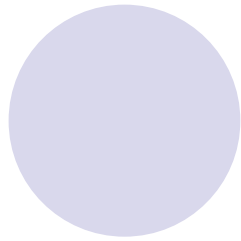


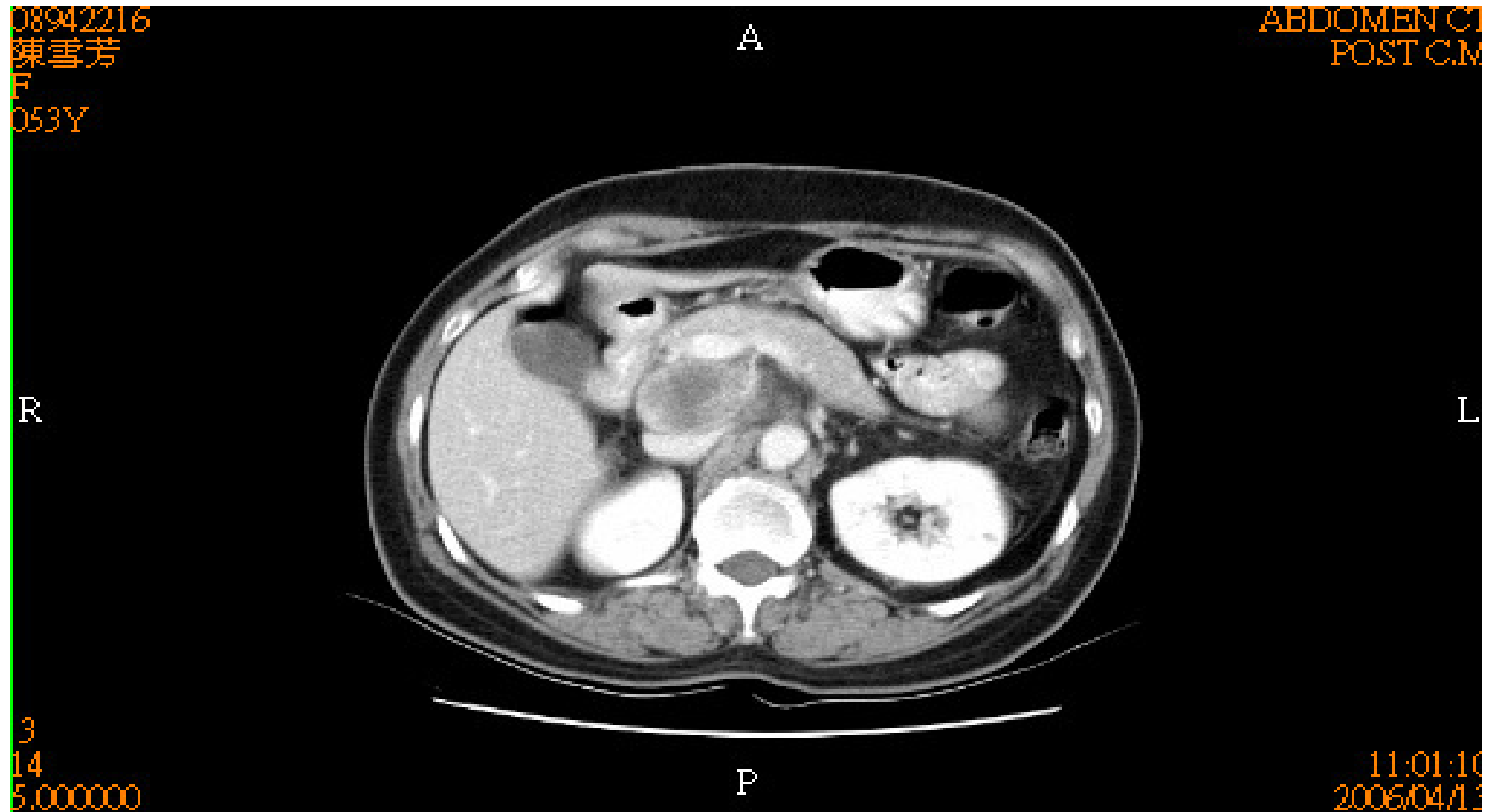
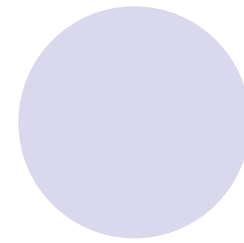
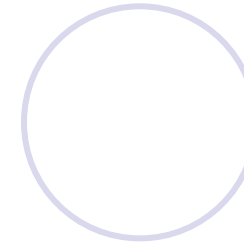
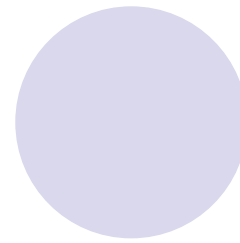
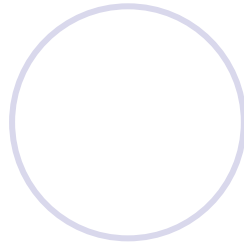
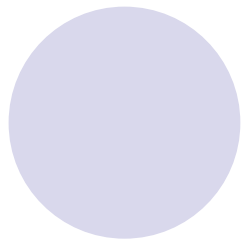


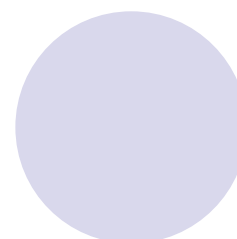
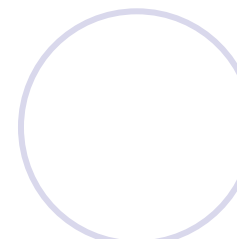
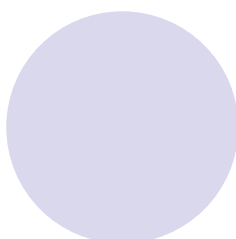
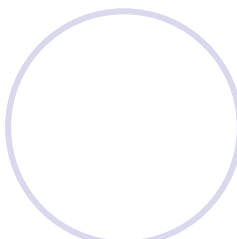
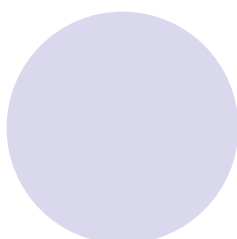












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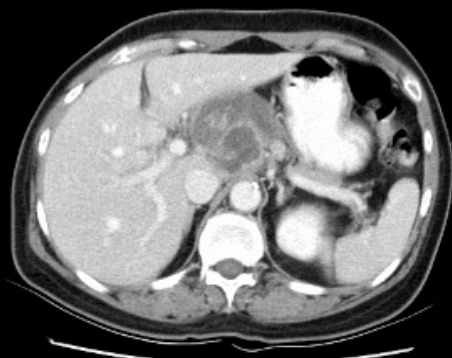
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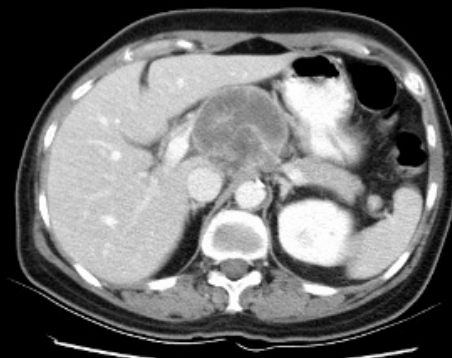
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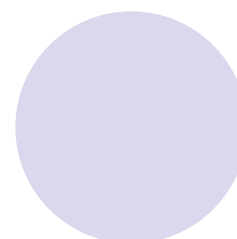
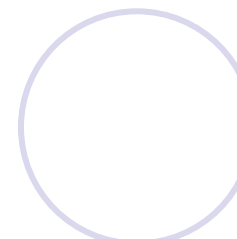
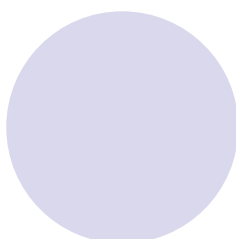
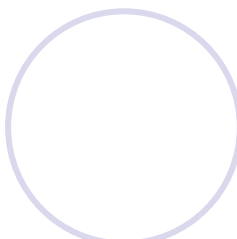
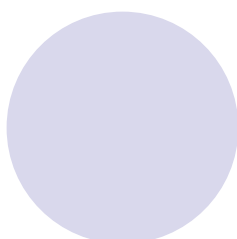
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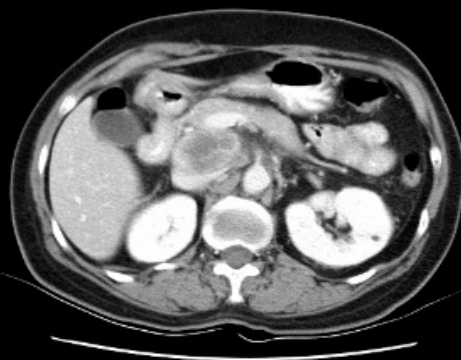
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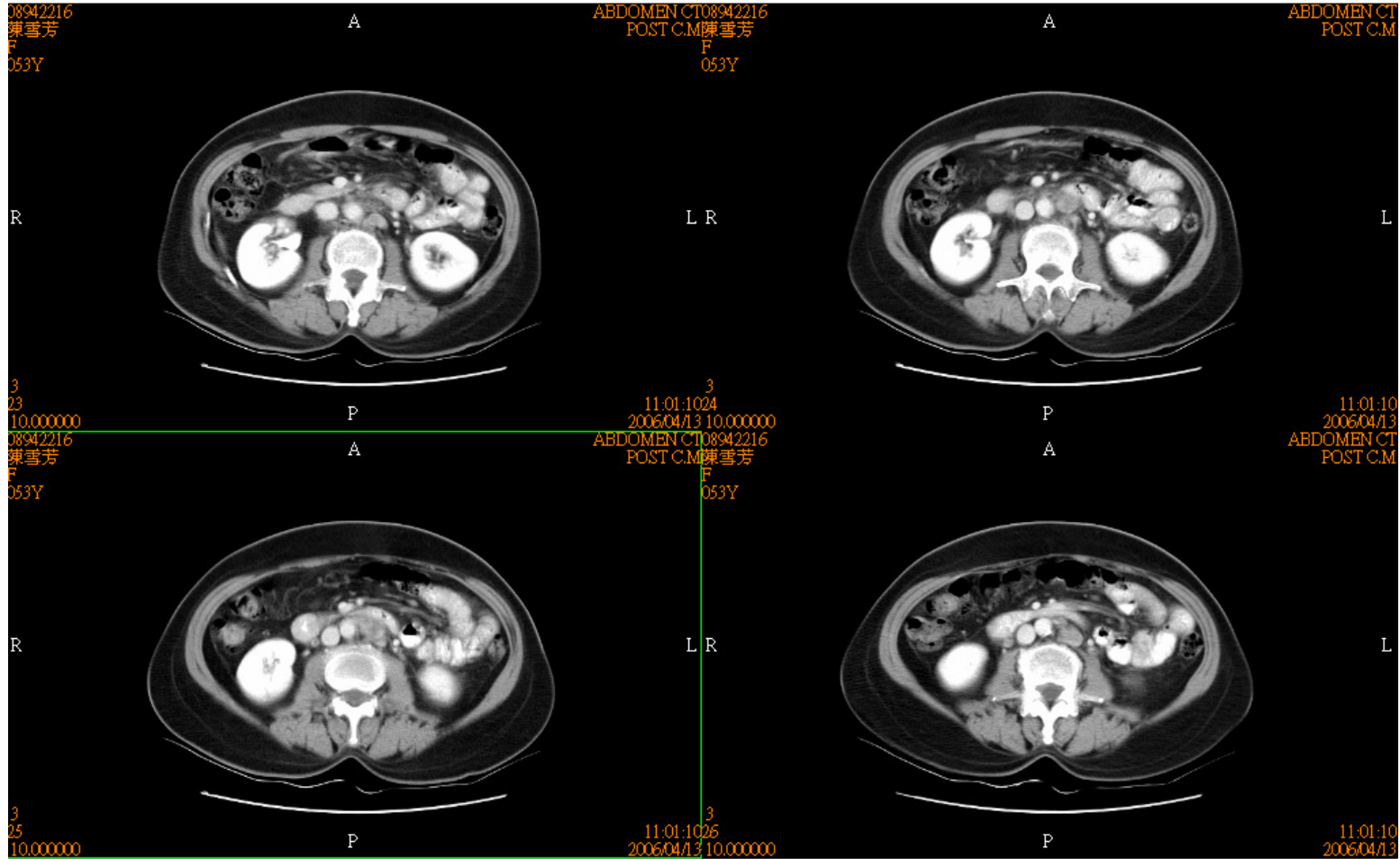
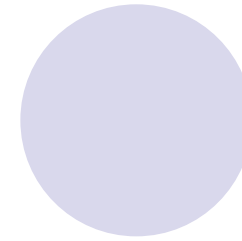
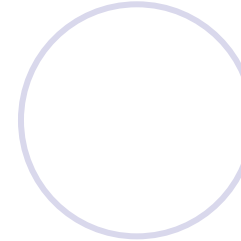
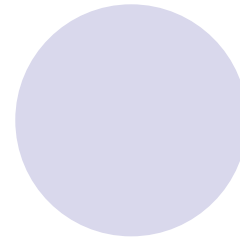
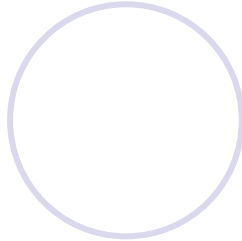
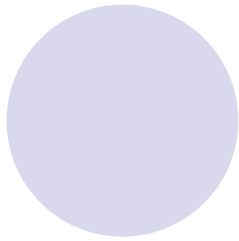
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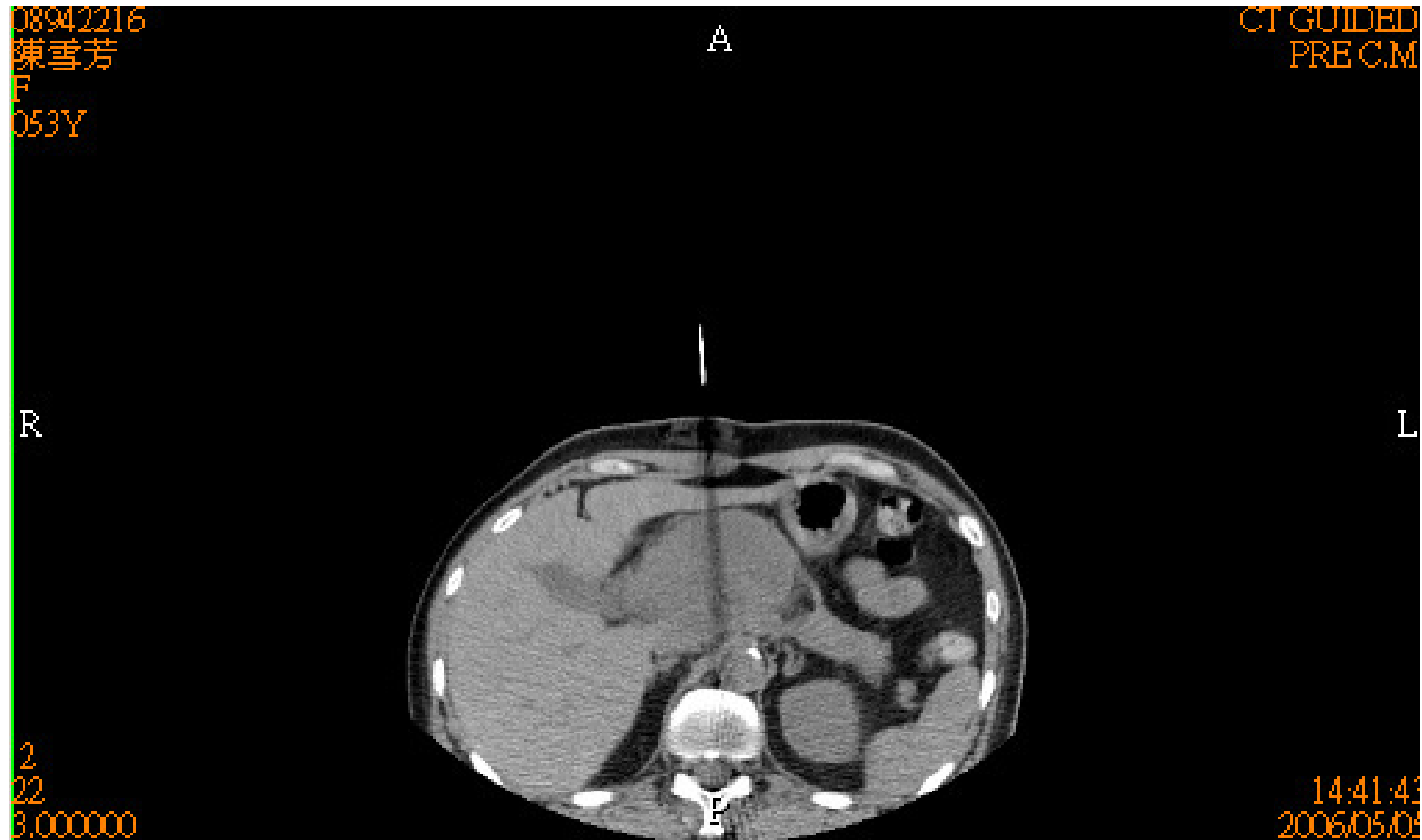
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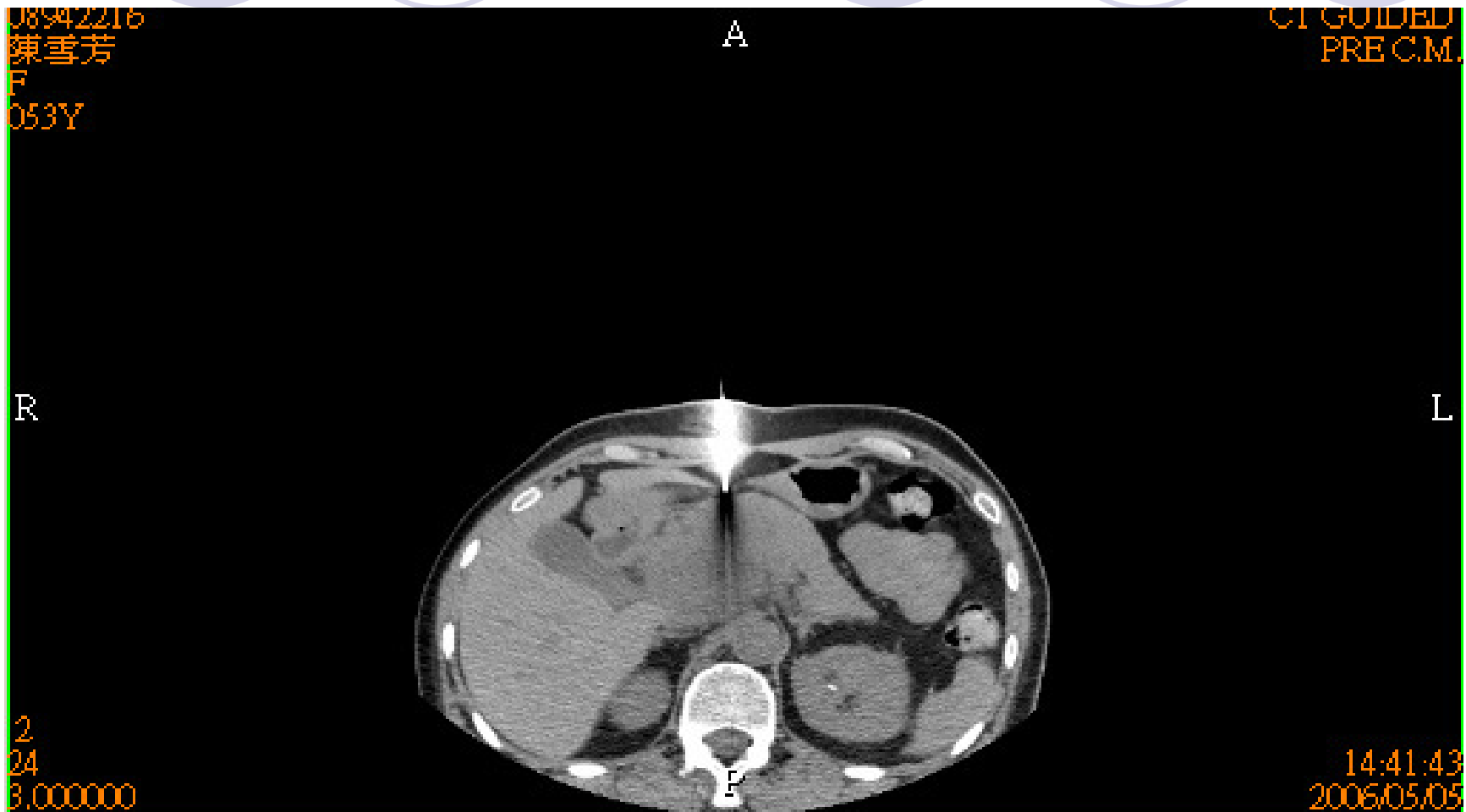
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CT guided biopsy(May 5th):





Pathology



- Aspiration cytology:(May 5th)

Some nests or sheet tumor cells with pleomorphic tumor nuclei and prominent nucleoli.

Eccentric cytoplasm is seen.

Adenocarcinoma is considered.



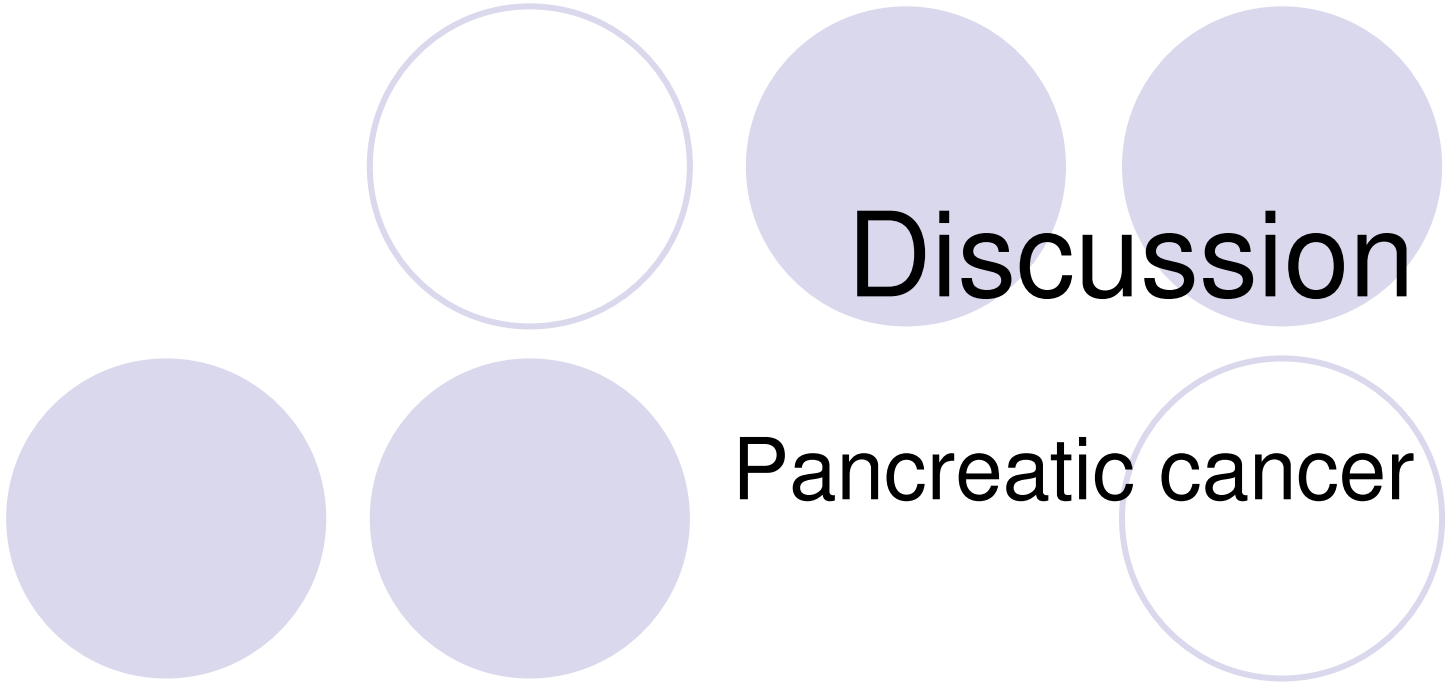
Impression

- Pancreatic head tumor, nature?
- Left pleural effusion, cause?
- Normocytic anemia, cause
- Myoma uteri s/p ATH

A decorative graphic at the top of the slide consists of two groups of circles. The left group has a solid light purple circle on the left and an outlined light purple circle on the right. The right group has a solid light purple circle on the left, an outlined light purple circle in the middle, and a solid light purple circle on the right.

Treatment

- Admission routine
- Symptom care for GI disturbance



Discussion

Pancreatic cancer

Epidemiology



- The fourth leading cause of cancer death in US.
- The second most common cause of death from GI malignancy.
- Its incidence is higher in developing countries.



Risk factors

- Age: mean age of seventh and eighth decades.
- Male gender, Jewish religion, and black race.(less than 2 folds)
- **Smoking(1.5~5.5 folds)**
- Genetic predisposition, medical history, family history
- DM?
- Chronic Pancreatitis



Clinical Presentation

- Early symptoms: nonspecific abdominal discomfort, nausea, vomiting, sleeping difficulties, anorexia, and generalized malaise.
- Late symptoms: Postprandial epigastric pain, *jaundice*(pancreatic head, obstruction), pruritus, claylike stool, and *weight loss*.

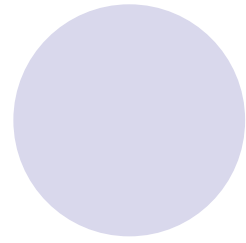
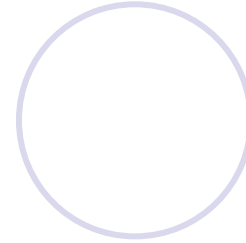
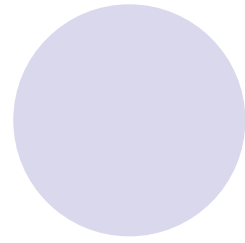
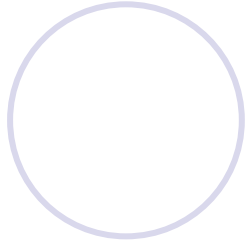
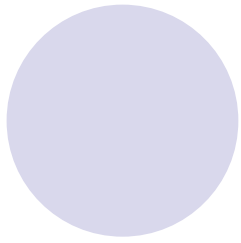


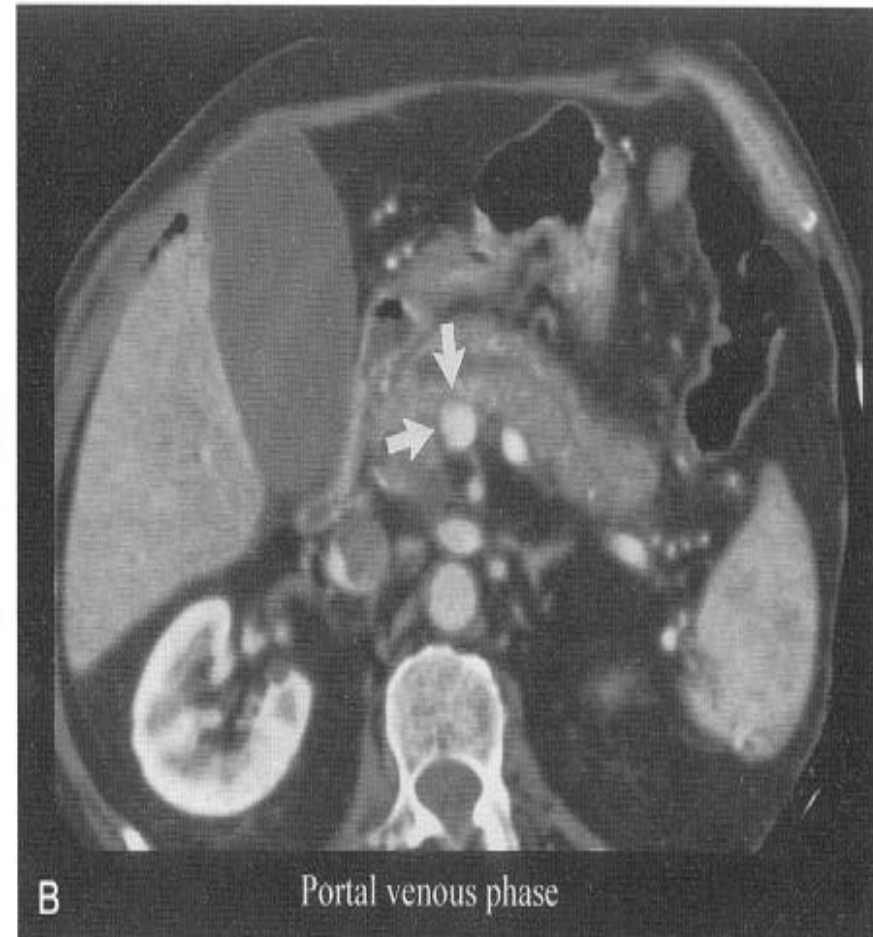
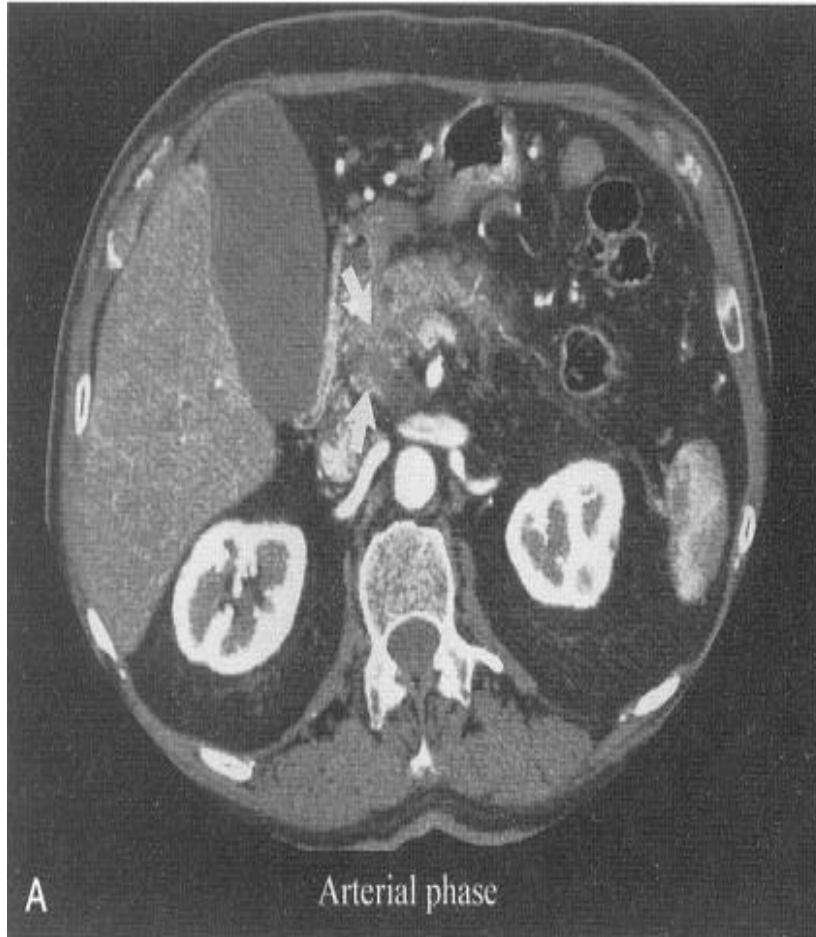
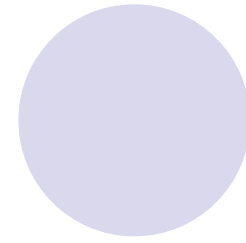
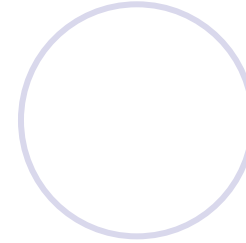
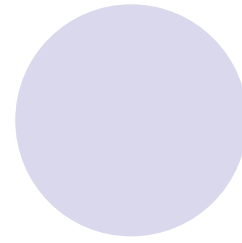
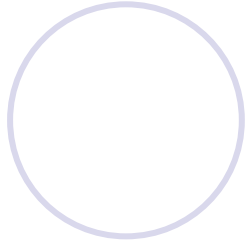
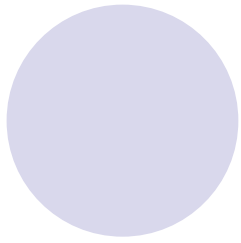
Specific Lab. findings

- A patient history, PE and serum bilirubin and alkaline phosphatase can be point to pancreatic cancer, but not diagnostic.
- CA-199: may help confirm diagnosis in symptomatic patients and predict prognosis and recurrence after operation, but lack sensitivity and specificity
- B-HCG and CA72-4

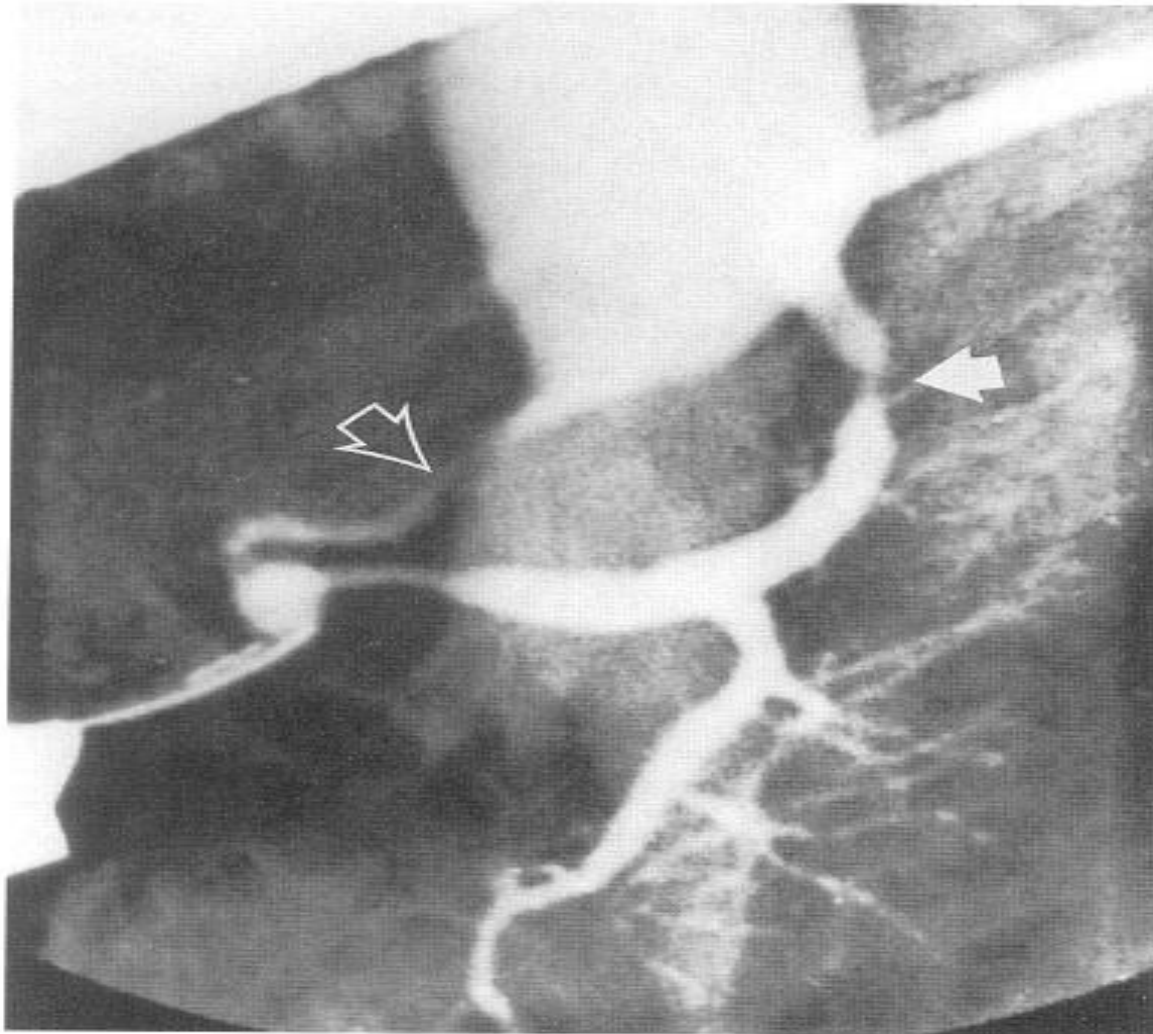
Typical Image



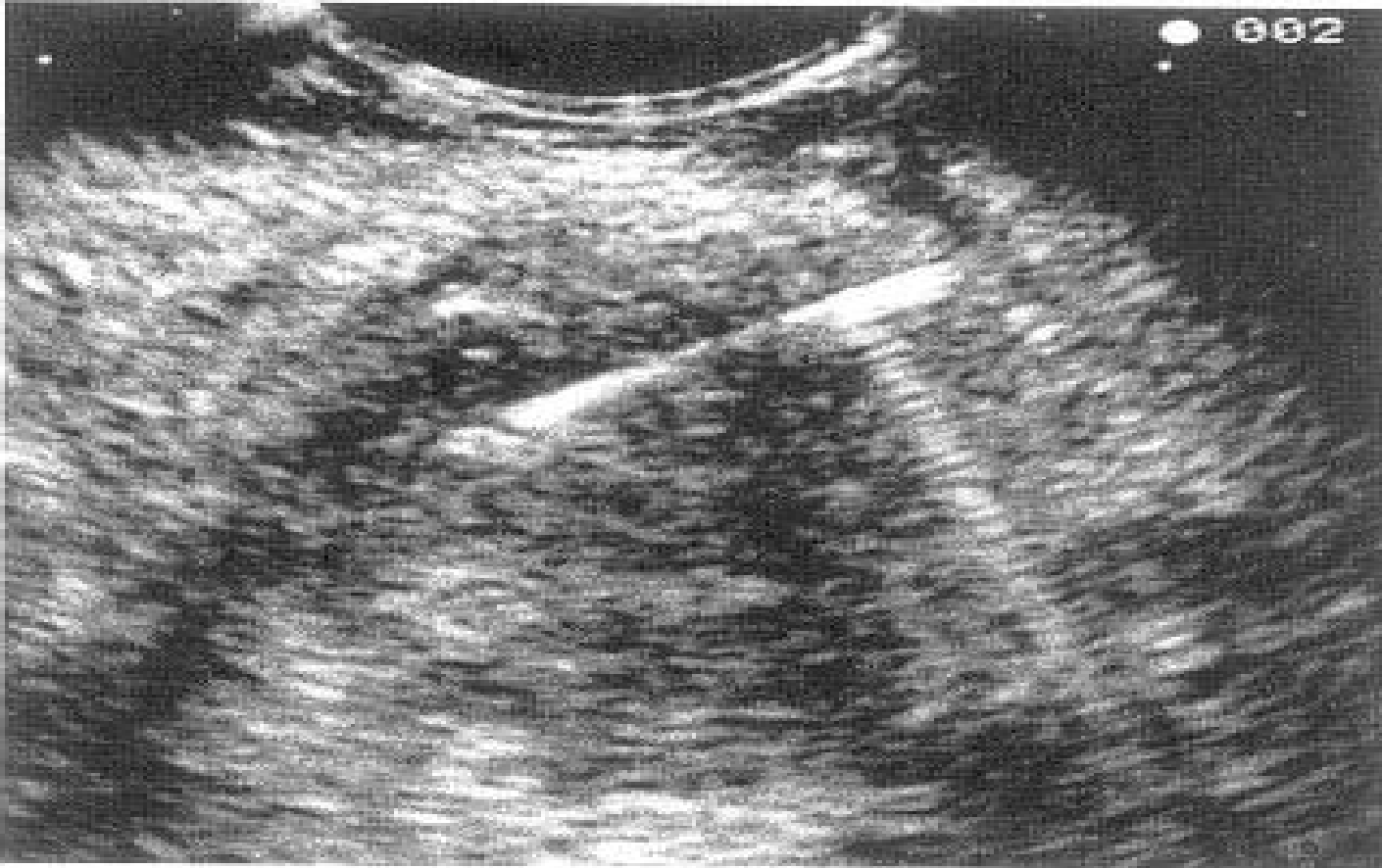




ERCPC



EUS



Staging



- **TNM System**

Tis Carcinoma in situ

T1 Tumor limited to the pancreas 2 cm or less in greatest dimension

T2 Tumor limited to the pancreas >2 cm in greatest dimension

T3 Tumor extends directly into any of the following: duodenum, bile duct, peripancreatic tissues

T4 Tumor extends directly into any of the following: stomach, spleen, colon, adjacent large vessels

N0 No regional lymph node metastases

N1 Regional lymph node metastases

M0 No distant metastases

M1 Distant metastases

TABLE 3
Tumor, Node, Metastasis Staging System for Pancreatic Cancer

<i>Stage</i>	<i>Classifications</i>	<i>Clinical classification</i>	<i>Stage distribution at diagnosis (%)</i>	<i>Five-year survival rate (%)</i>
0	Tis, N0, M0	Resectable	7.5	15.2
IA	T1, N0, M0			
IB	T2, N0, M0			
IIA	T3, N0, M0			
IIB	T1-3, N1*, M0	Locally advanced	29.3	6.3
III	T4, any N, M0			
IV	Any T, any N, M1	Metastatic	47.2	1.6

Tis = in situ carcinoma; N0 = no regional lymph node metastasis; M0 = no distant metastasis; T1 = tumor is limited to the pancreas and is 0.8 in (2 cm) or smaller; T2 = tumor is limited to the pancreas and is larger than 0.8 in; T3 = tumor extends beyond the pancreas and does not involve celiac axis or superior mesenteric artery; N1 = regional lymph node metastasis; T4 = tumor involves celiac axis or superior mesenteric artery; N = regional lymph nodes; T = primary tumor; M1 = distant metastasis.

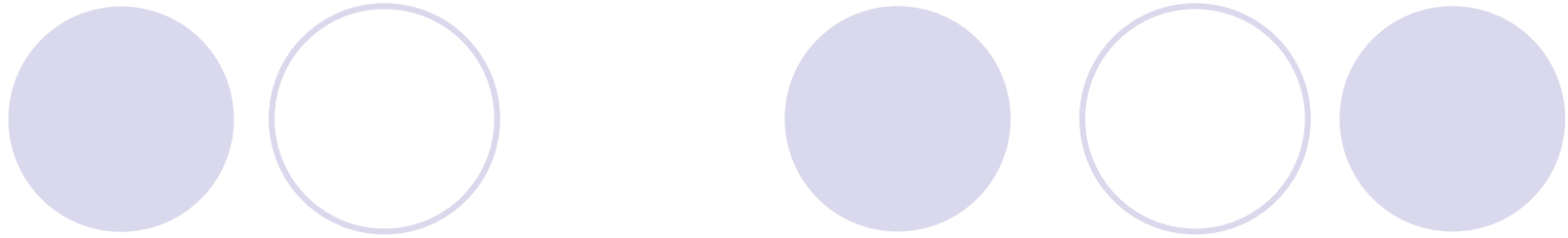
**—Tumors with regional lymph node involvement are sometimes considered surgically resectable if nodes are within the resection area.*

Information from references 28 and 29.

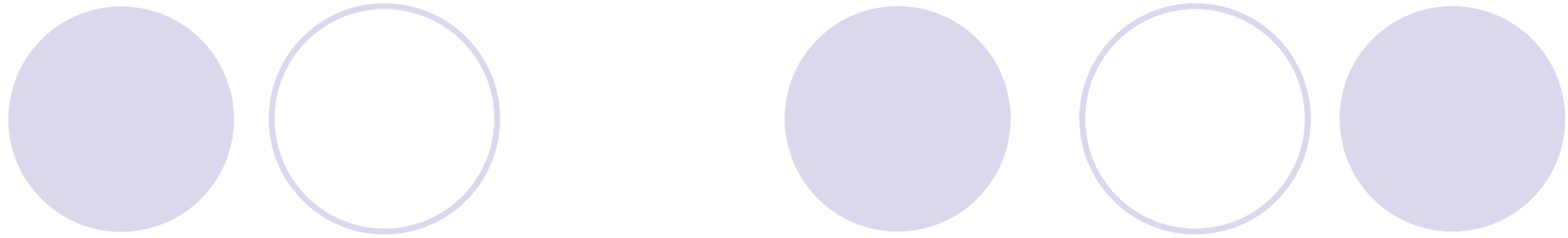


Treatment

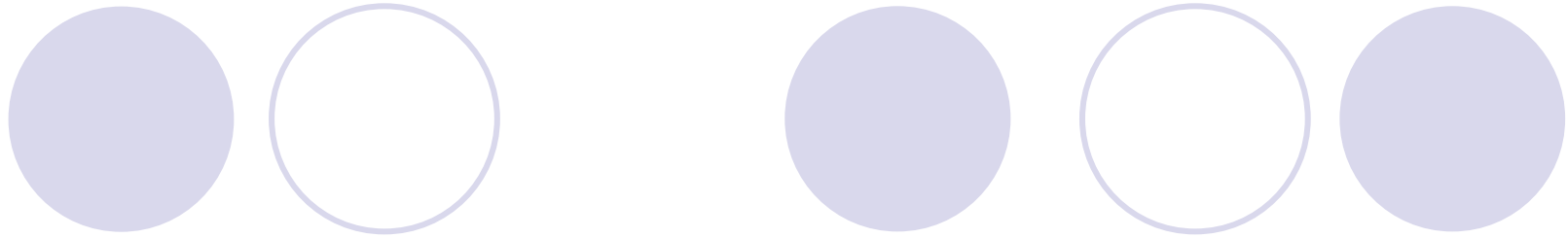
- Resectable lesion: Tumor arising in the tail of the pancreas and those of >4 cm are rarely resectable.
- Surgical resection is the only potentially curative treatment for patients with pancreatic cancer, although many patients are not candidates for resection.



- Only 10~15% can receive Whipple resection at the time of diagnosis.
- Pylorus-preserving pancreaticoduodenostomy: the same long-term survival benefits as the standard Whipple procedure(shorter operative time and reduced blood loss, decreasing the need for blood transfusions.)



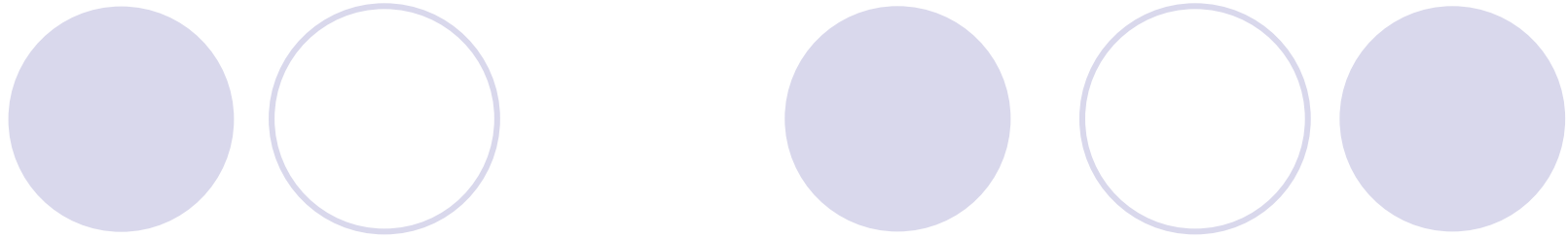
- Adjuvant therapy for resectable pancreatic cancer: postoperative 5-FU and radiation
- Locally unresectable lesions:
ERCP with stent placement or palliative bypass surgery(biliary obstruction)
Celiac plexus block (debilitating pain)



- Locally advanced diseases:

Radiation therapy alone can relieve pain and possibly prolong survival.

Combined modality therapy with 5-FU and radiation can prolong survival for 5-10 months.



- Metastatic pancreatic cancer:

Palliation of symptoms!

Gemcitabine is better than 5-FU because of its ability to improve quality of life.

Prognosis



- Overall 5 year survival rate: 3%
- Patients who have a resection are alive at 5 years: 20%
- Likely increasing long-term cure: Tumor <2 cm, LN w/o metastasis, and no major vessels involvement.



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Brand R - *Dis Mon* - 01-OCT-2004; 50(10): 545-55
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