

211차 심포지움

증례 1

서울성모병원
호흡기내과

Chief complaint

Patient : 맹 ○ ○ (M/25)

Unit No. : 23522661

검진상 발견된 흉부 X-ray 이상

ROS> 체중감소; 20 kg/1 yr

Present illness

- ▶ 25세 남자
- ▶ 특별한 증상 없이 1월초 시행한 건강 검진에서 흉부 X-ray 이상 소견 보여 큰 병원 권유 받고 내원.

History

Past history

HTN/ DM/ Tbc / Hepatitis (-/-/-/-)

Family history

N-S

Social history

Alcohol : 2회/월, 소주 1병/회

Smoking : 1갑/주, 10년간

Physical examination

Vital Signs	100/60 mmHg – 70/min – 18/min – 36.9 °C
General	Not so ill looking appearance
HEENT	Normocephaly, Isocoria /c PLR (++/++) Non- anemic conjunctivae, anicteric sclerae No pharyngeal injection, no tonsillar enlargement
Chest	Clear breathing sounds with rales at both lung fields Regular heart beat s murmur
Abdomen	Soft and flat Normoactive bowel sound
Extremity	Pretibial pitting edema (-/-)

Laboratory findings

Complete Blood Cell Count

WBC :6,960 /mm³ (Seg 70.8%, Lympho 15.8%, eosino. 0.7%)

Hb/Hct : 12.6 g/dL / 38.7% Platelet :460,000 /mm³

Blood Chemistry

Glucose : 96 mg/dL

TP/Alb : 8.5 /3.9 g/dL

BUN/Cr : 7.6/0.64 mg/dL

AST/ALT : 23/17 U/L

ALP/LDH : 118/640 IU/L

Na/K : 138/4.3 mEq/L

Ca/P : 9.2/3.7 mg/dL

UA

protein: trace , occult blood: negative, WBC :1-3/HPF, RBC: <1/HPF

ESR 120 mm/h (0-15)

CRP 7.99 mg/dL (0-0.5)

ABGA (room air)

7.388 – 30.6 – 94.0 – 18.0 - 97.1 %

Hbs Ag/Ab (-/+)

Anti-HCV (-)

HIV Ag/Ab(-/-)

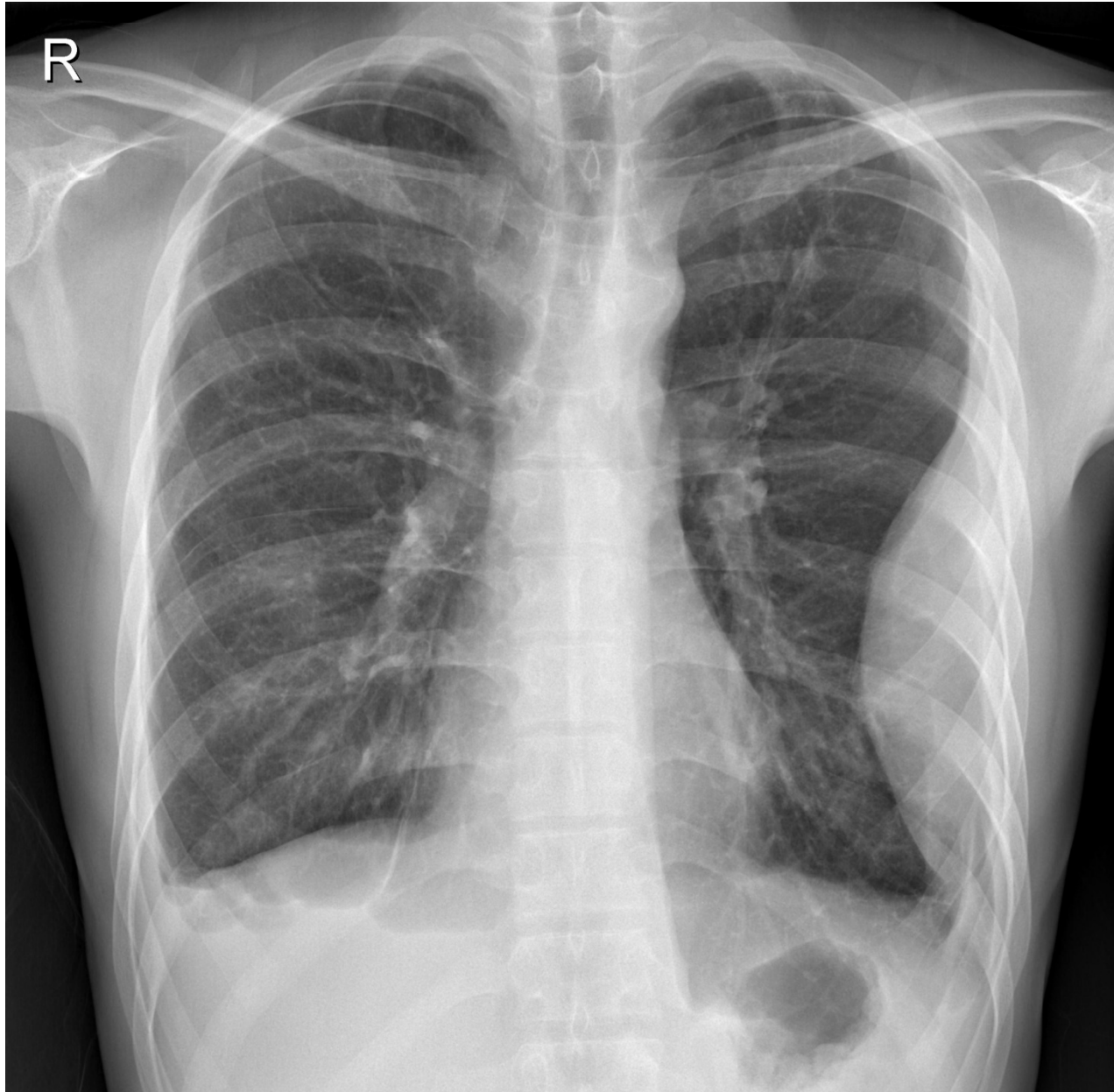
Syphilis Reagin test (-)

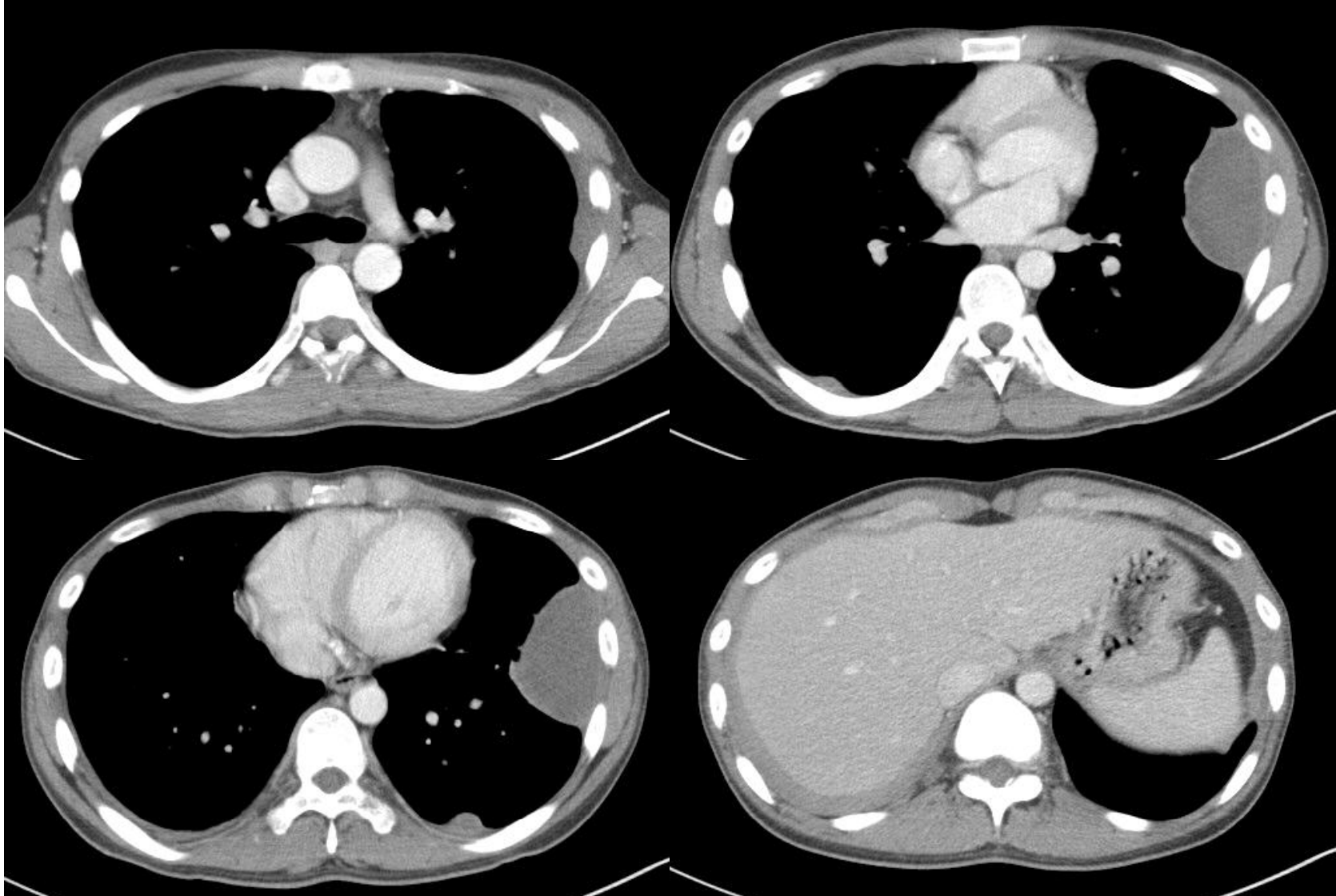
AFP 1.2 ng/ml (<10)

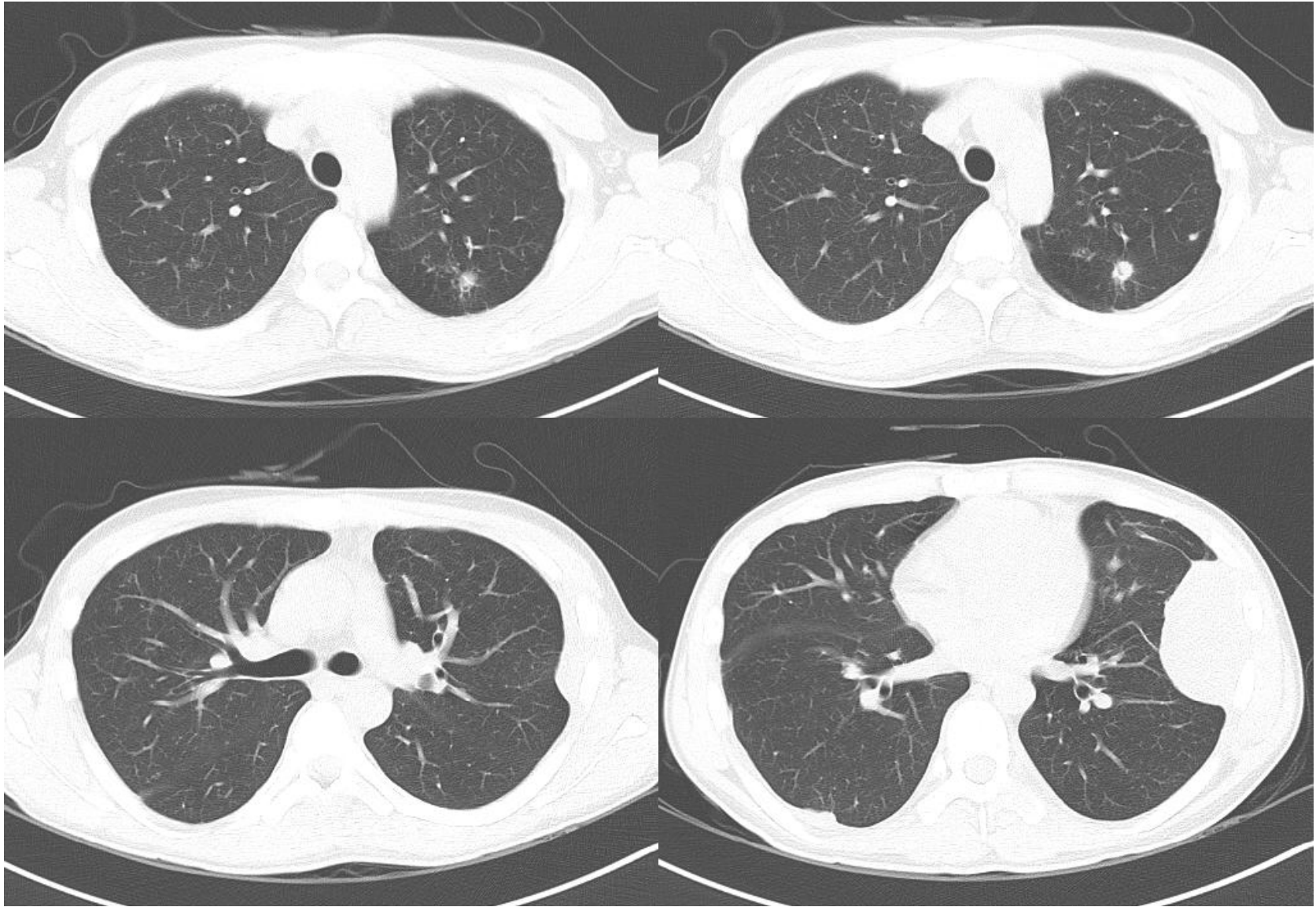
CEA 0.23 ng/ml (<3)

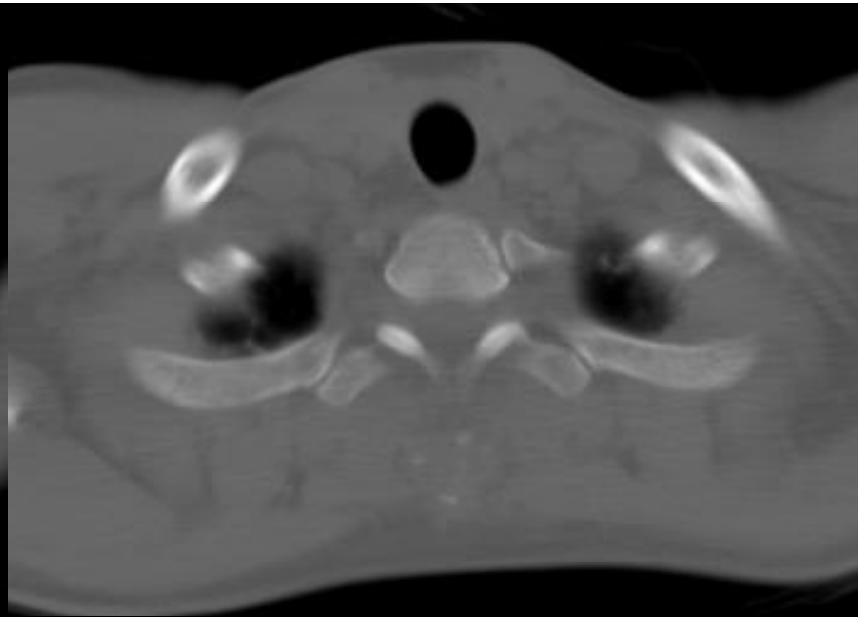
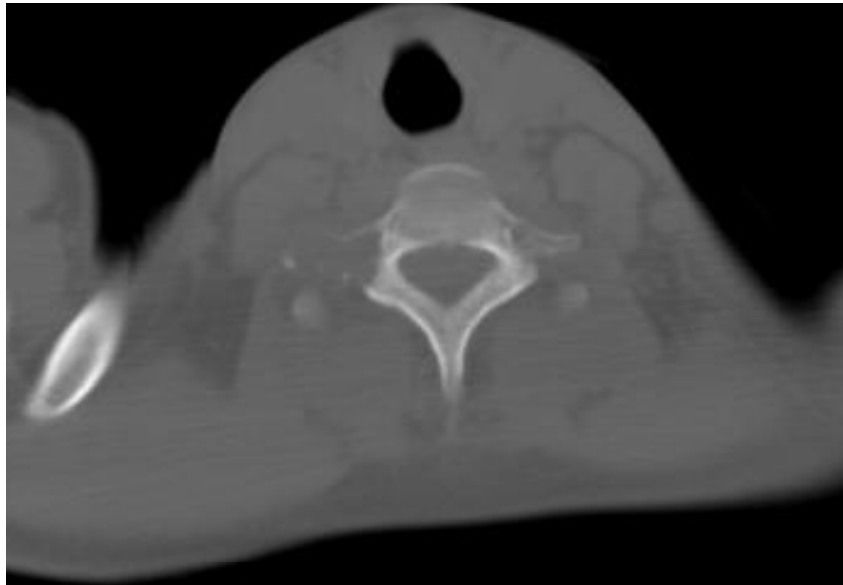
Clinical course (I)

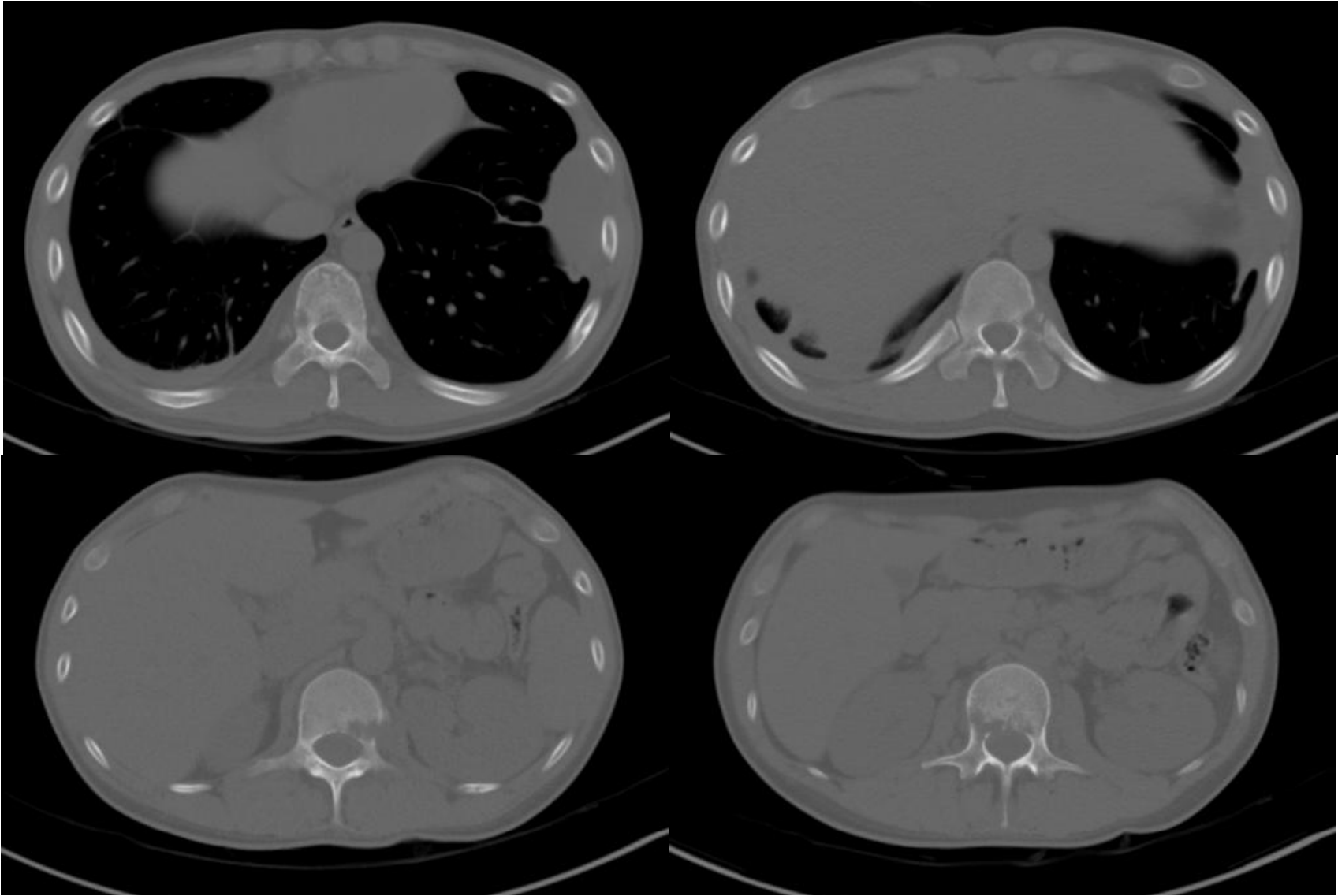
- X-ray & Chest CT







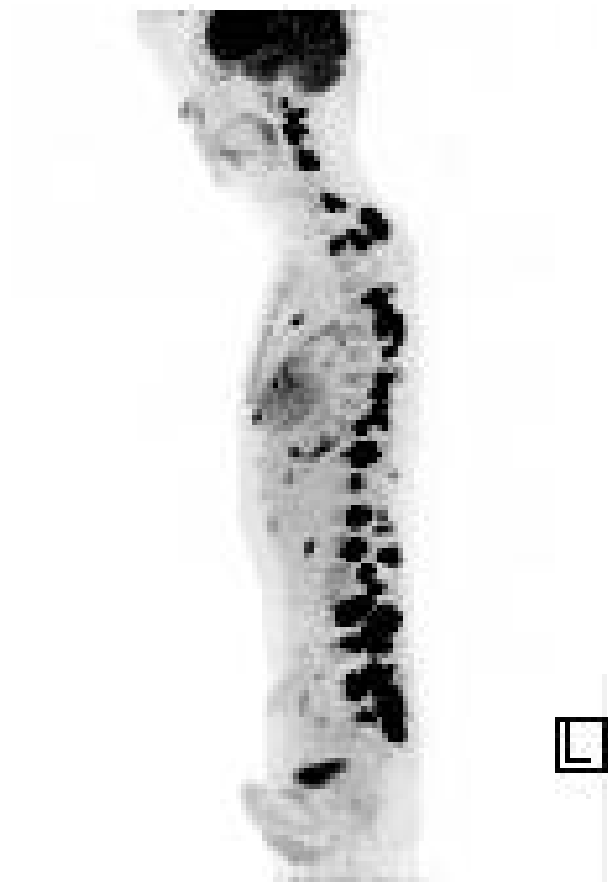
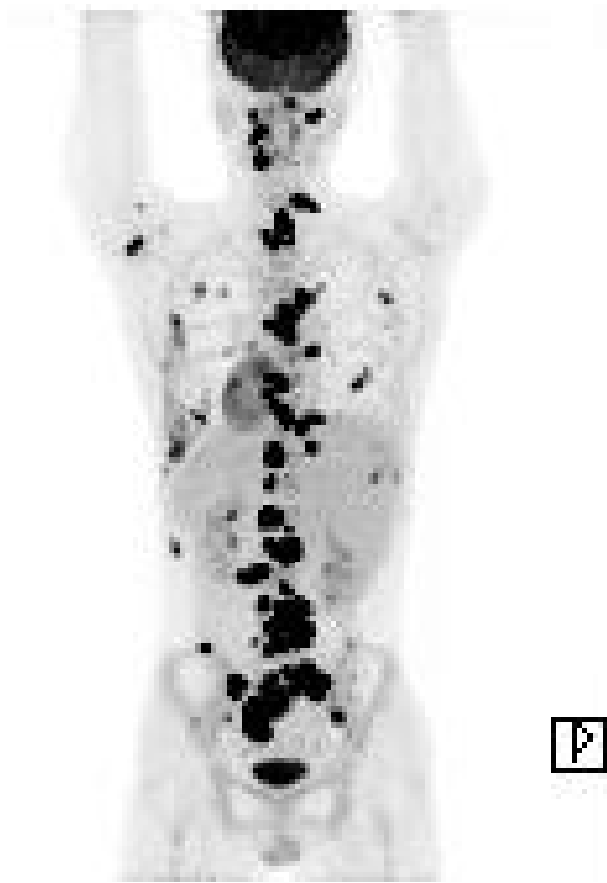




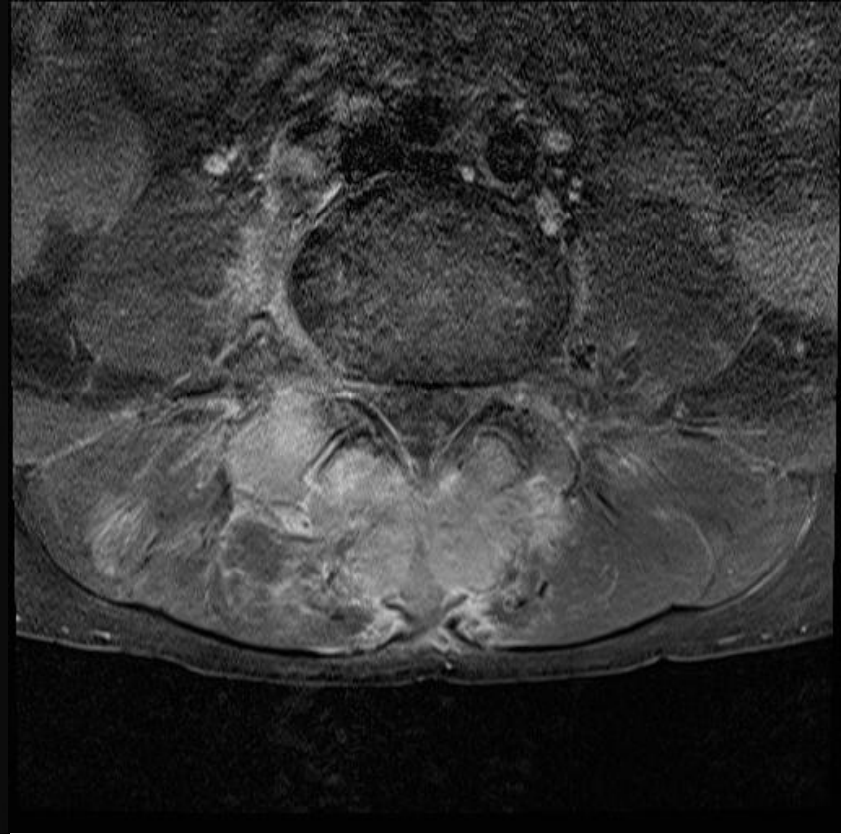
Clinical course (II)

- X-ray & Chest CT
- CT-guided bone biopsy
- PET- CT
- Bone scan, Spine MRI









- **Radiologic Impression**

1) lung and thorax- pulmonary TB with chronic empyema

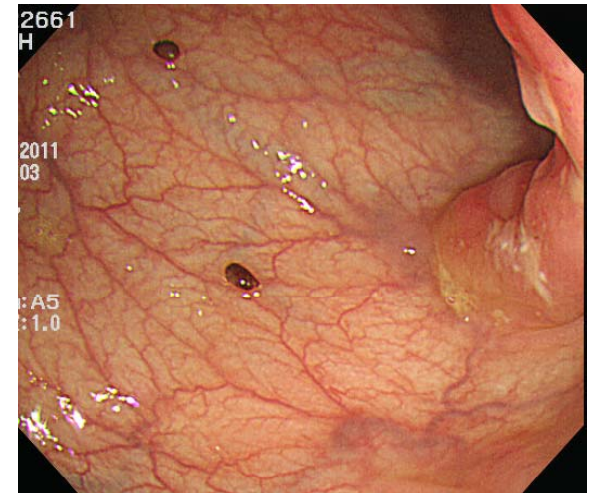
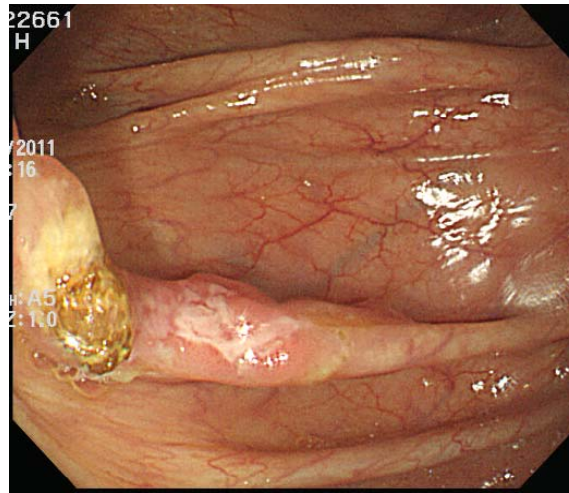
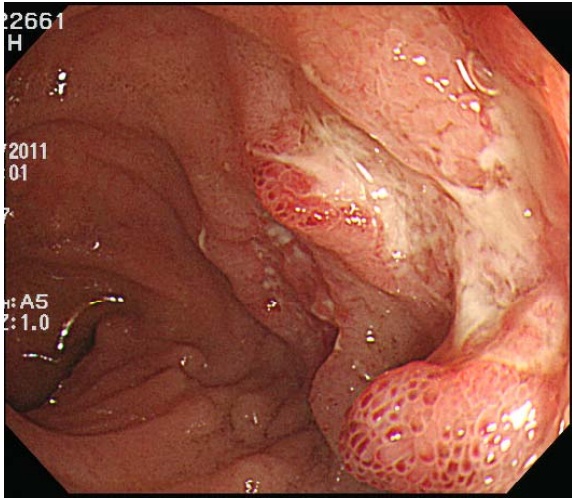
2) Bone ?

→ metastasis

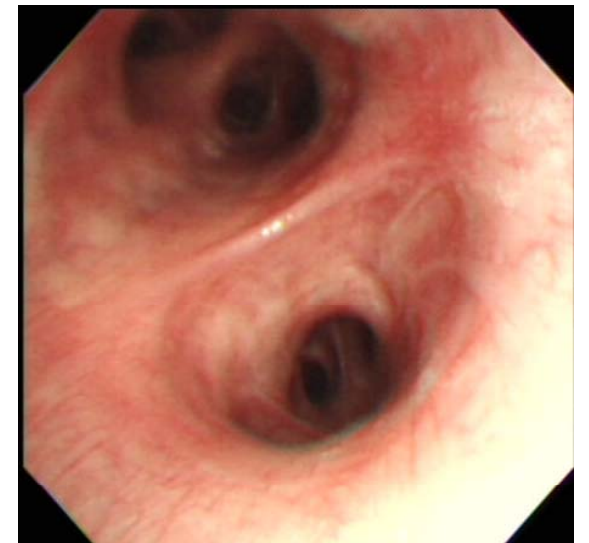
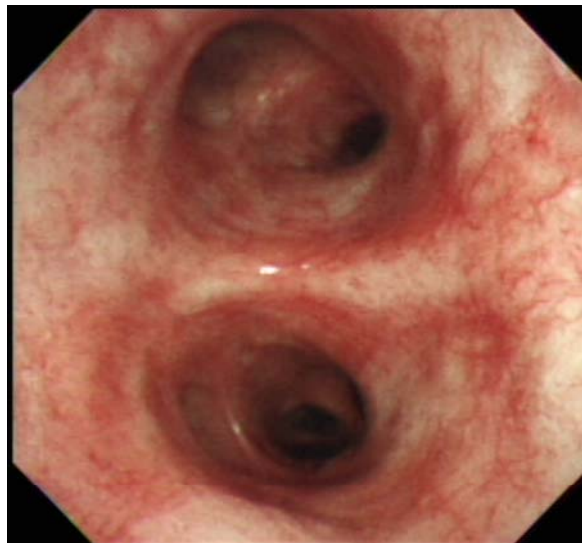
→ unusual TB disseminated to the of skeletal systems

Clinical course (III)

- X-ray & Chest CT
- CT-guided bone biopsy
- PET- CT
- Bone scan, Spine MRI
- Colonoscopy
- Bronchoscopy
- Pleural biopsy and drainage



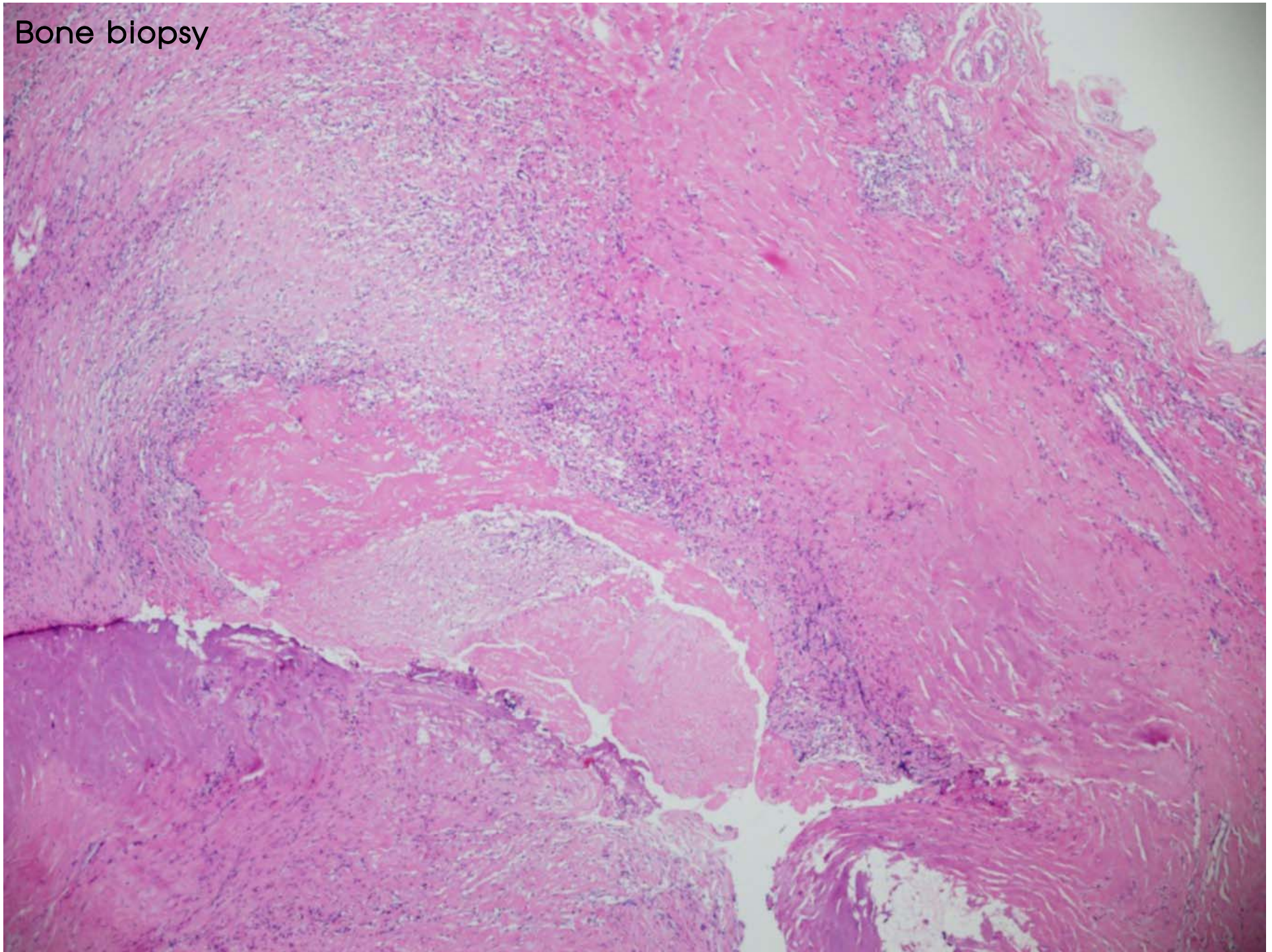
Colonoscopy : irregular, circular ulcer at terminal ileum, proximal A –colon, and distal T-colon



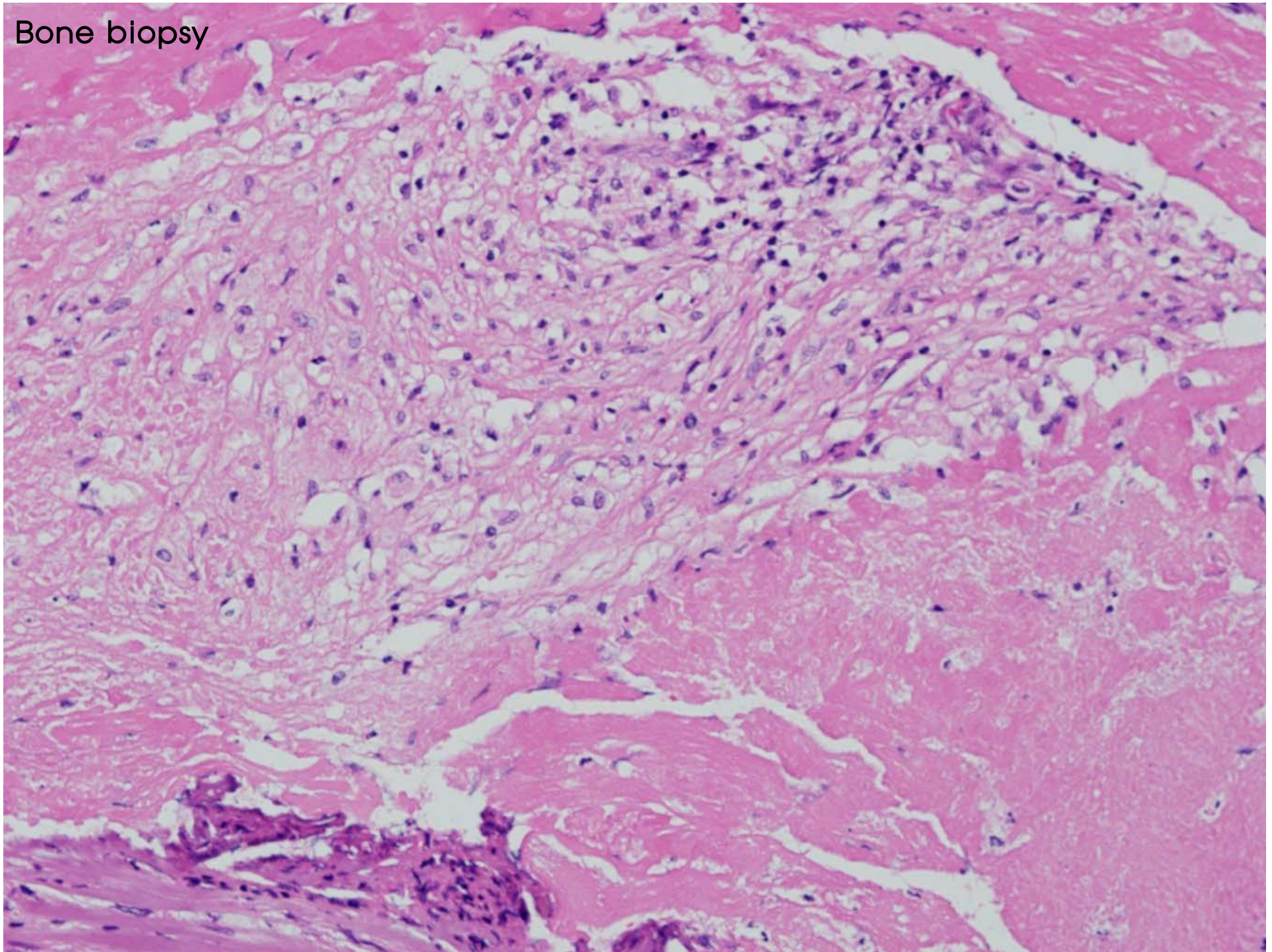
Bronchoscopy : no endobronchial lesion

- 조직 소견

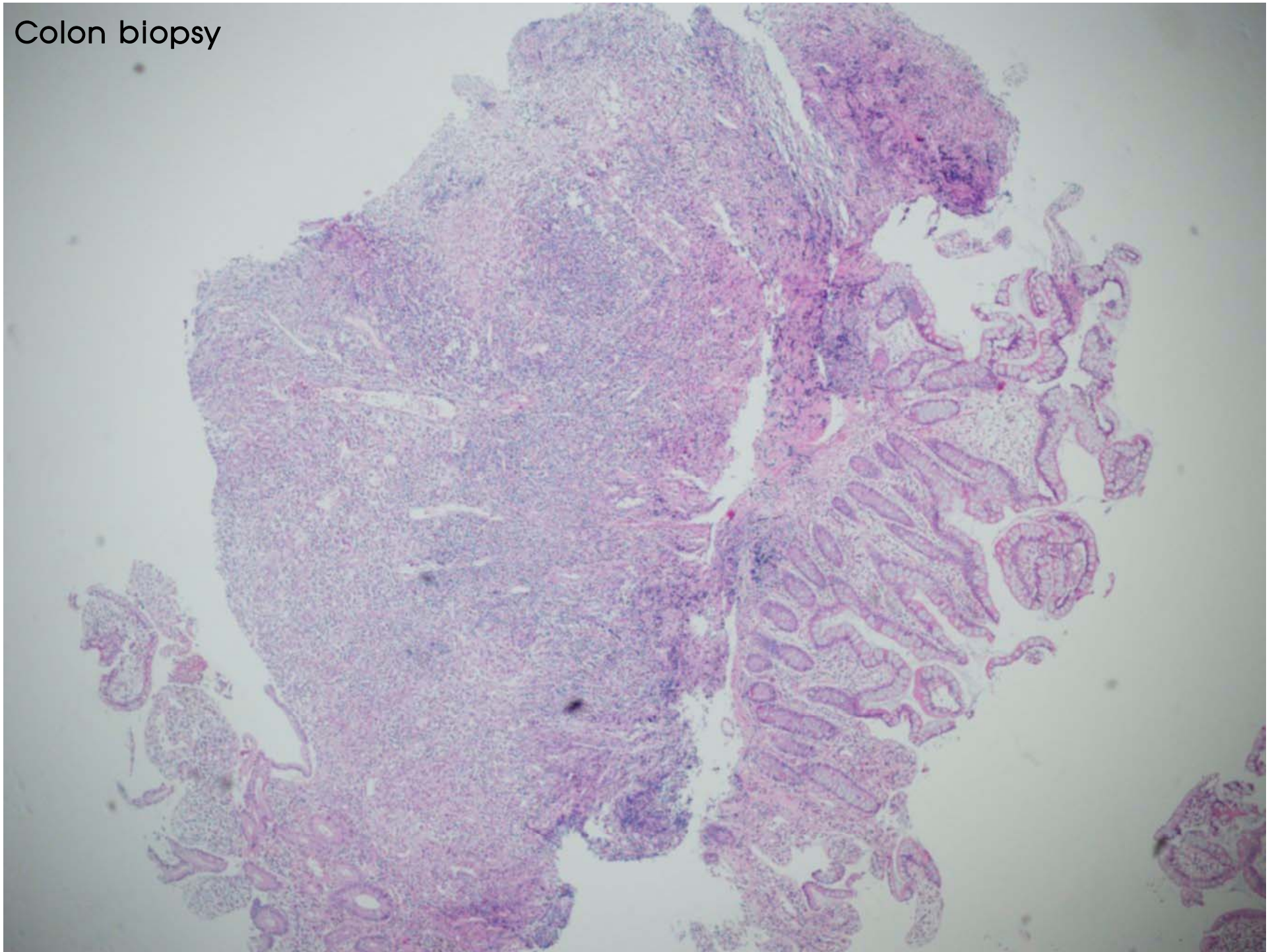
Bone biopsy



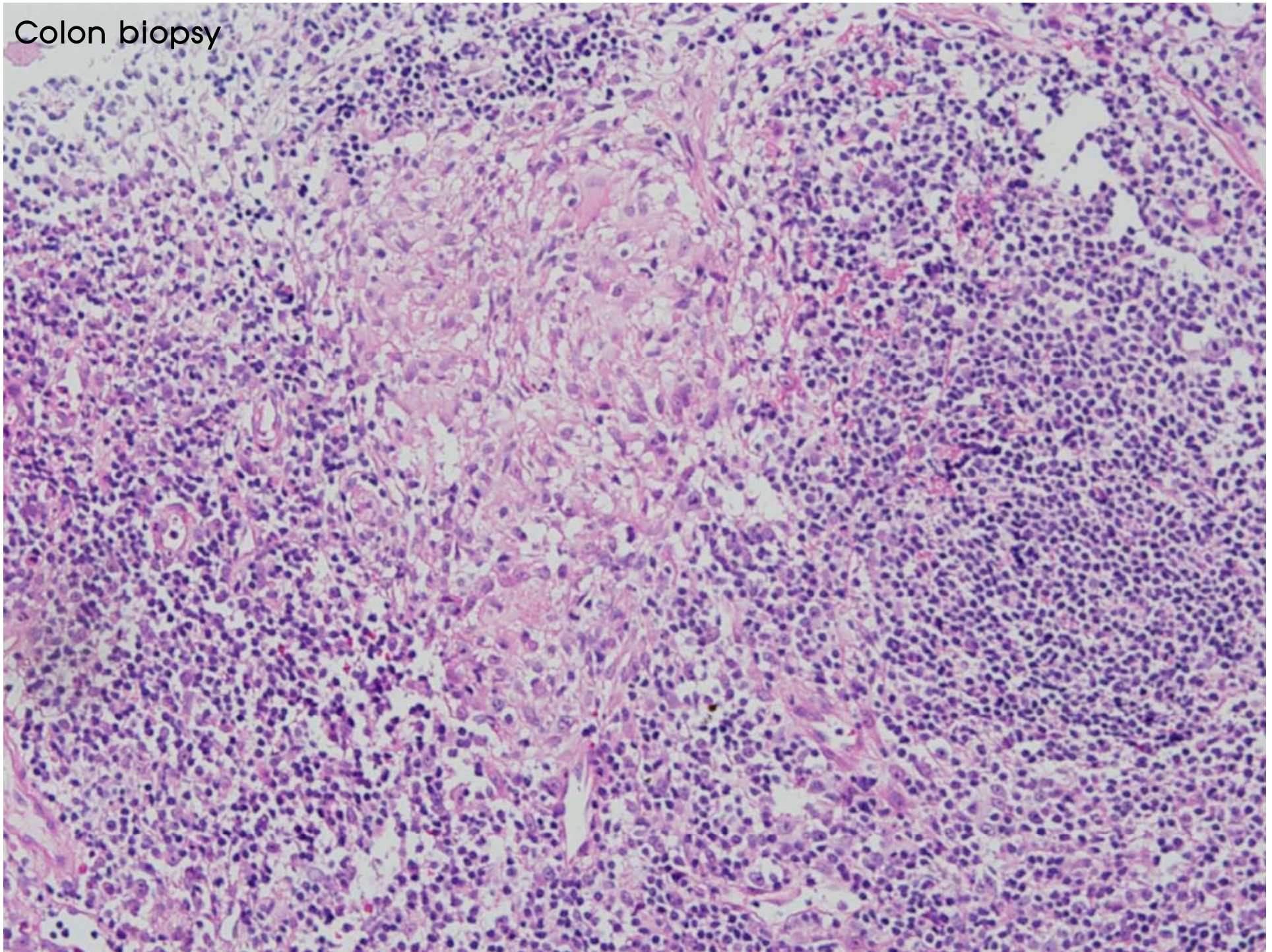
Bone biopsy



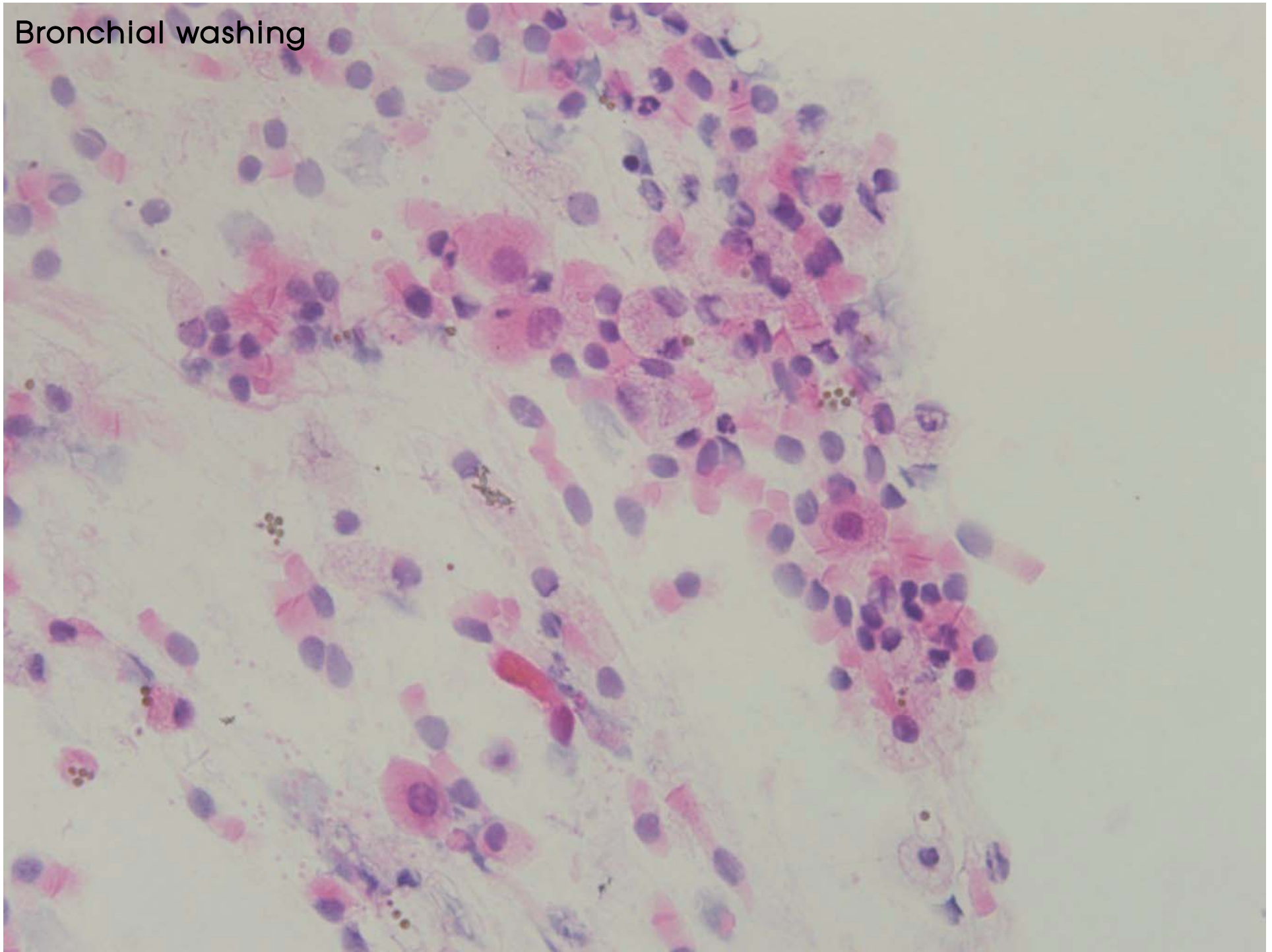
Colon biopsy



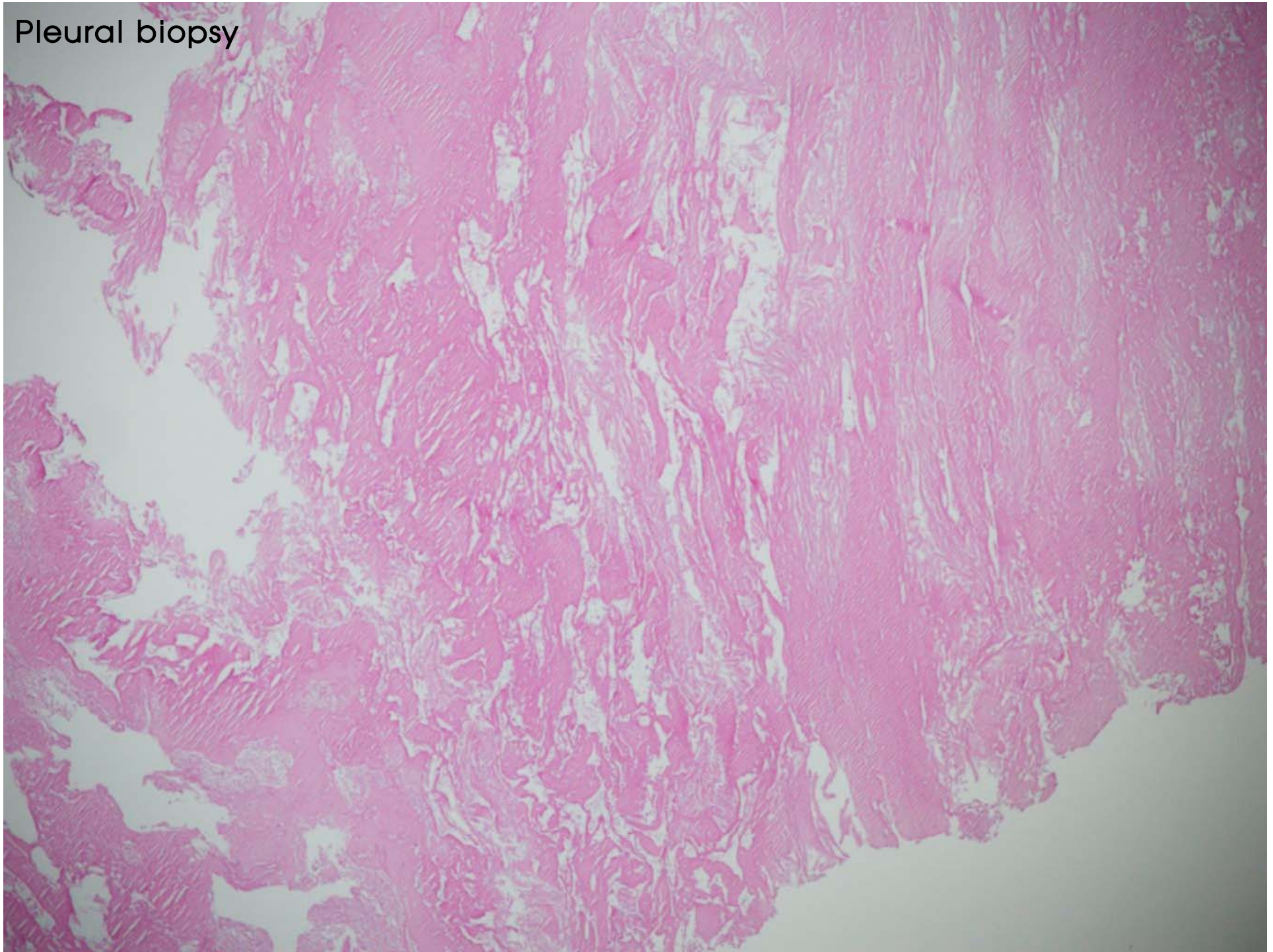
Colon biopsy



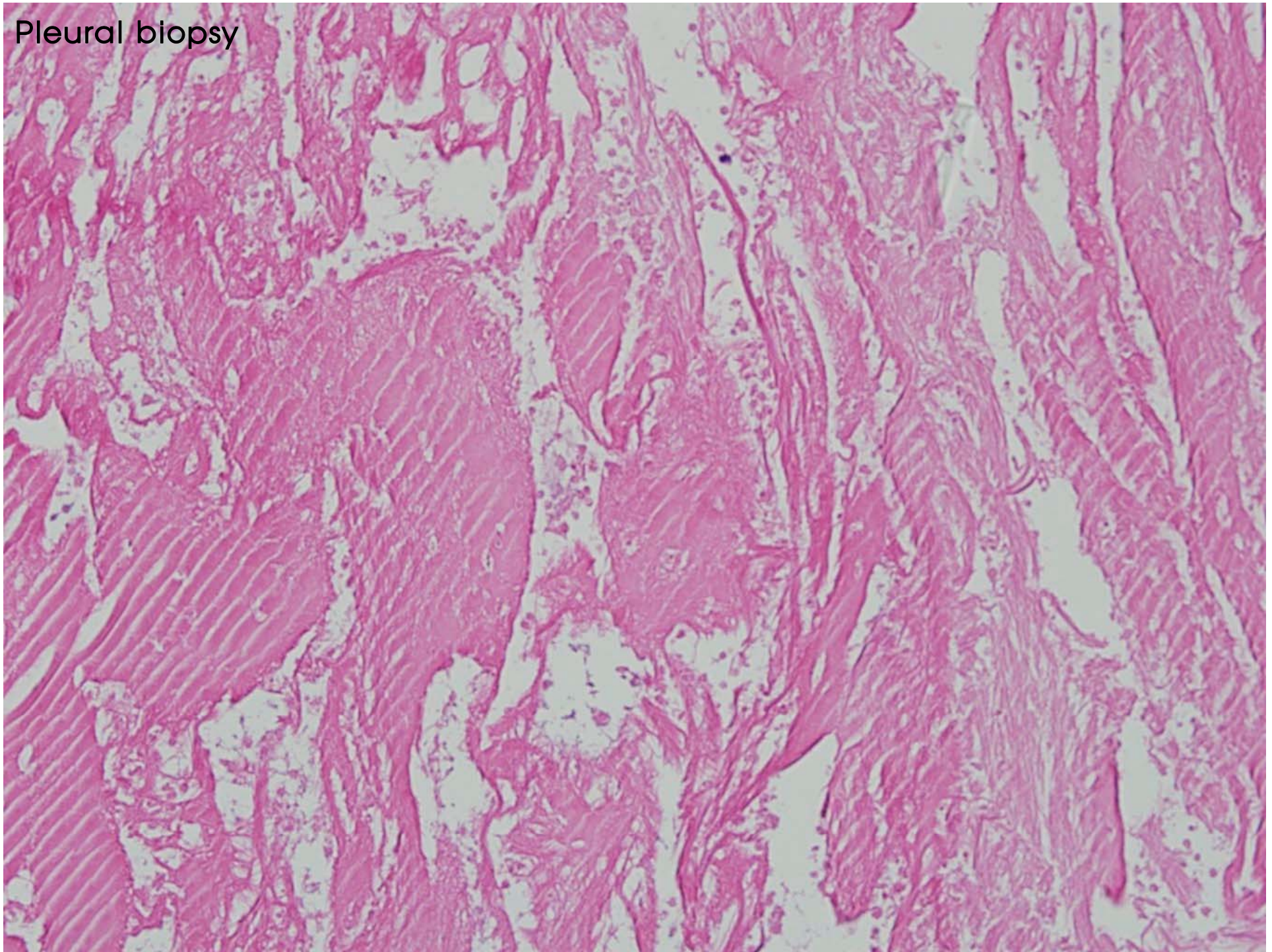
Bronchial washing



Pleural biopsy



Pleural biopsy



Clinical course (IV)

- Bronchial washing fluid- MTB culture, MTB PCR 양성
 - Pleura- MTB PCR 양성
 - 결핵 신속내성 검사- Isoniazide & Rifampin; susceptible
- > Disseminated TB(Bone, pleural, intestine) 진단
- > Anti-TB medication(HERZ) 치료

REVIEW

MULTIFOCAL SKELETAL TUBERCULOSIS

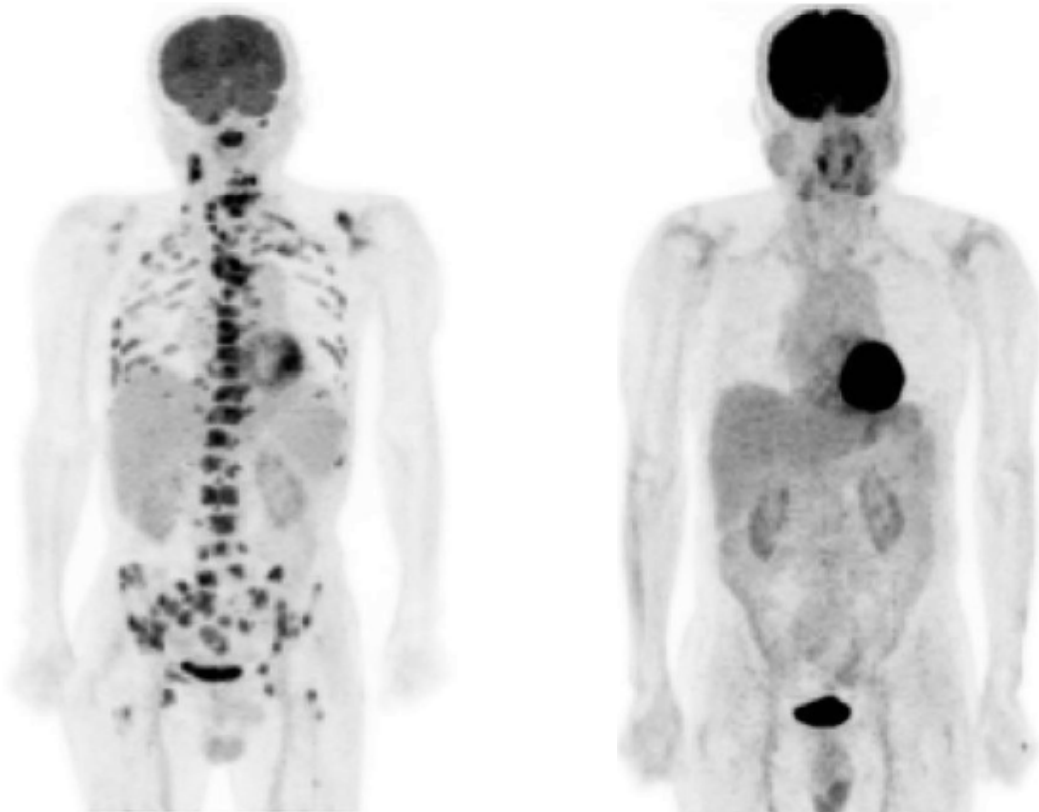
Multifocal Skeletal Tuberculosis

- Involves two or more locations in the skeletal system
- Very rare
- May mimic metastatic tumors or primary osseous lesions
- Usually occurs in immunocompromised patients
- No radiographic evidence of pulmonary involvement in 50% of patients
- **Site of involvement:**
 - Spine (40-60%)- lumbar & thoracic > cervical (2-3%)
 - Weight -bearing joints (30%): hip, knee
 - Others (20%): pubis, wrist, shoulder, sacroiliac, rib

- Radiological imaging
 - Tuberculous lesions- osteolytic, sclerosis, pathologic fractures
 - Plain x-ray: loss of vertebral height, angular kyphosis, paravertebral masses, soft tissue swelling, cartilage loss, joint space destruction
 - Bone scan
 - CT: detailed delineation of bony destruction & extension of disease into spinal canal
 - MRI : intraspinal extension, focal myelopathy, spinal cord or nerve root compression

- Dx: Aspiration of the abscess or bone biopsy
 - Arthrocentesis, synovial biopsy

PET-CT scan



68/male

C/C : malaise, right cervical lymph node (LN)

LN biopsy- granuloma

Antituberculous drugs for 2
mons (HERZ)



No response for lymph node



Referred and PET-CT
Bone & LN biopsy



NTM (*M.kansasii*) tx . for
6mons (PZ->
Clarithromycin)

- **Treatment**

- 1) Antituberculous chemotherapy: HERZ

- Duration: traditionally, 12-18 month courses of therapy advocated
 - Multidrug-resistance increasing in prevalence: mirrors resistance in strains causing pulmonary disease

- 2) Surgery

- <indication>

- severe joint deformation
 - drain cold abscesses
 - debride infected tissue
 - stabilize the spine,
 - relieve spinal cord compression

증례 2

서울성모병원

Chief complaint

Patient : 정 ○ 일 (M/54)

Unit No. : 22864044

4개월간의 흉부 불편감

Present illness

- 54세 남자
- 기저 질환 없던 자로 내원 4개월 전부터 발생한
흉부 불편감과 피로 때문에 개인의원 내원하여 시행한
흉부 CT에서 이상소견 발견되어 검사및 치료 위해 내원

History

Past history

HTN/ DM/ Tbc / Hepatitis (-/-/-/-)

Family history

N-S

Social history

Alcohol : N-S

Smoking : 1ppd for 20yrs, current

OP history

C-spine & L-spine HNP op – 10yrs ago

Occupational history

서비스업

Physical examination

Vital Signs	110/70 mmHg – 100/min – 20/min – 36.5°C
General	Acute ill looking appearance
HEENT	Normocephaly, Isocoria /c PLR (++/++) Non- anemic conjunctivae, anicteric sclerae Facial and upper arm edema
Chest	Clear breathing sounds without wheezing or rale Regular heart beat s murmur
Abdomen	Soft and flat Normoactive bowel sound
Extremity	Pretibial pitting edema (-/-)

Laboratory findings

Complete Blood Cell Count

WBC :6,680 /mm³ (Seg 59.4%, Lympho 28.4%, eosino. 2.8%)

Hb/Hct : **11.7** g/dL / **34.9** % Platelet :213,000 /mm³

Blood Chemistry

Glucose : 99 mg/dL

TP/Alb : 8.5 /4.1 g/dL

BUN/Cr : 14.8/ 0.72 mg/dL

AST/ALT : **53**/ 21 U/L

CPK/LDH : 52/**1018** U/L

Na/K : 141/4.9 mEq/L

Ca/P : 9.0/3.8 mg/dL

UA

protein: negative , occult blood: negative, WBC :<1/HPF, RBC: <1/HPF

Hbs Ag/Ab (-/+)

Anti-HCV (-)

HIV Ag/Ab(-/-)

Syphilis Reagin test (-)

AFP 3.1 ng/ml (<10)

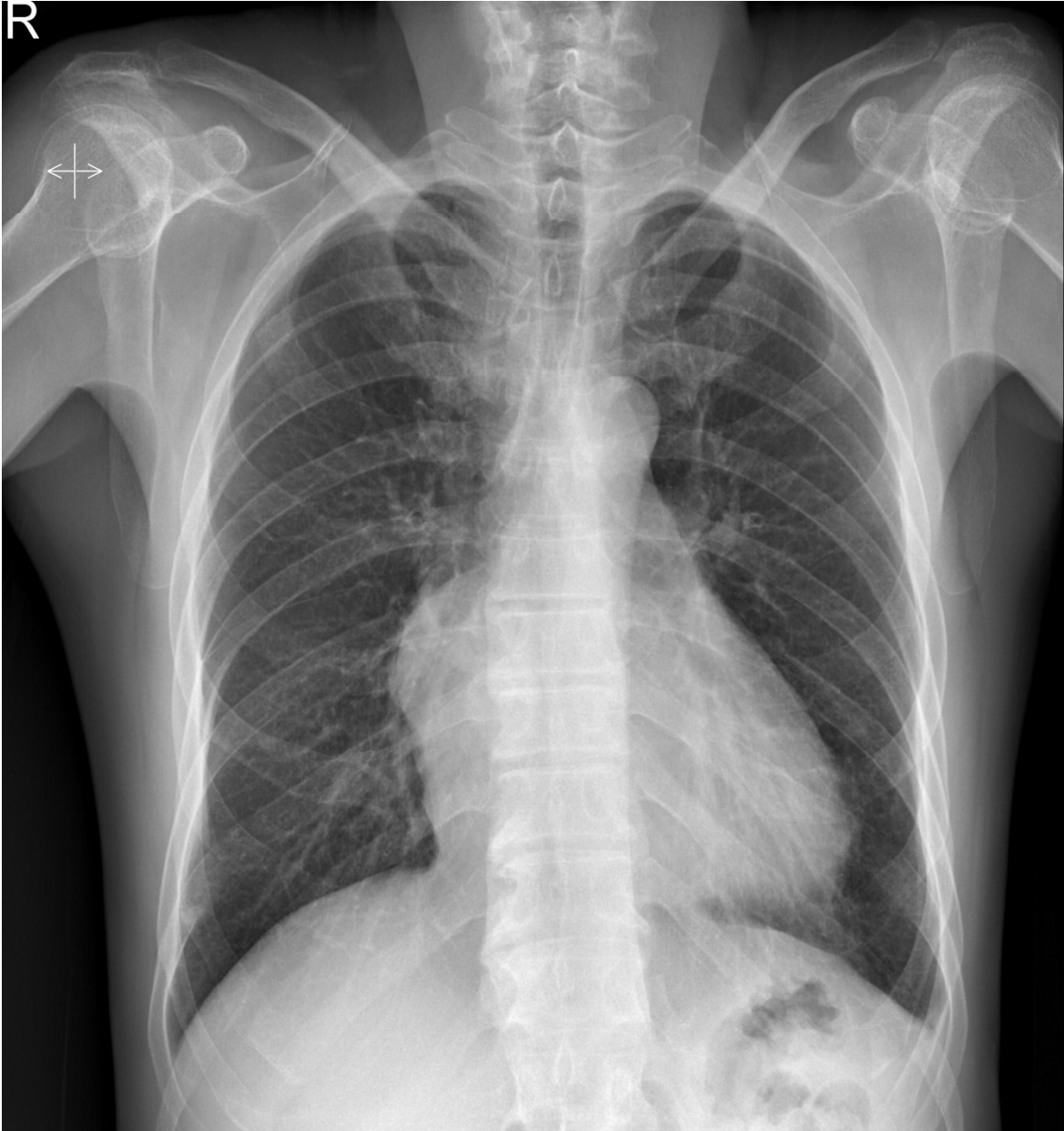
CEA 1.02 ng/ml (<3)

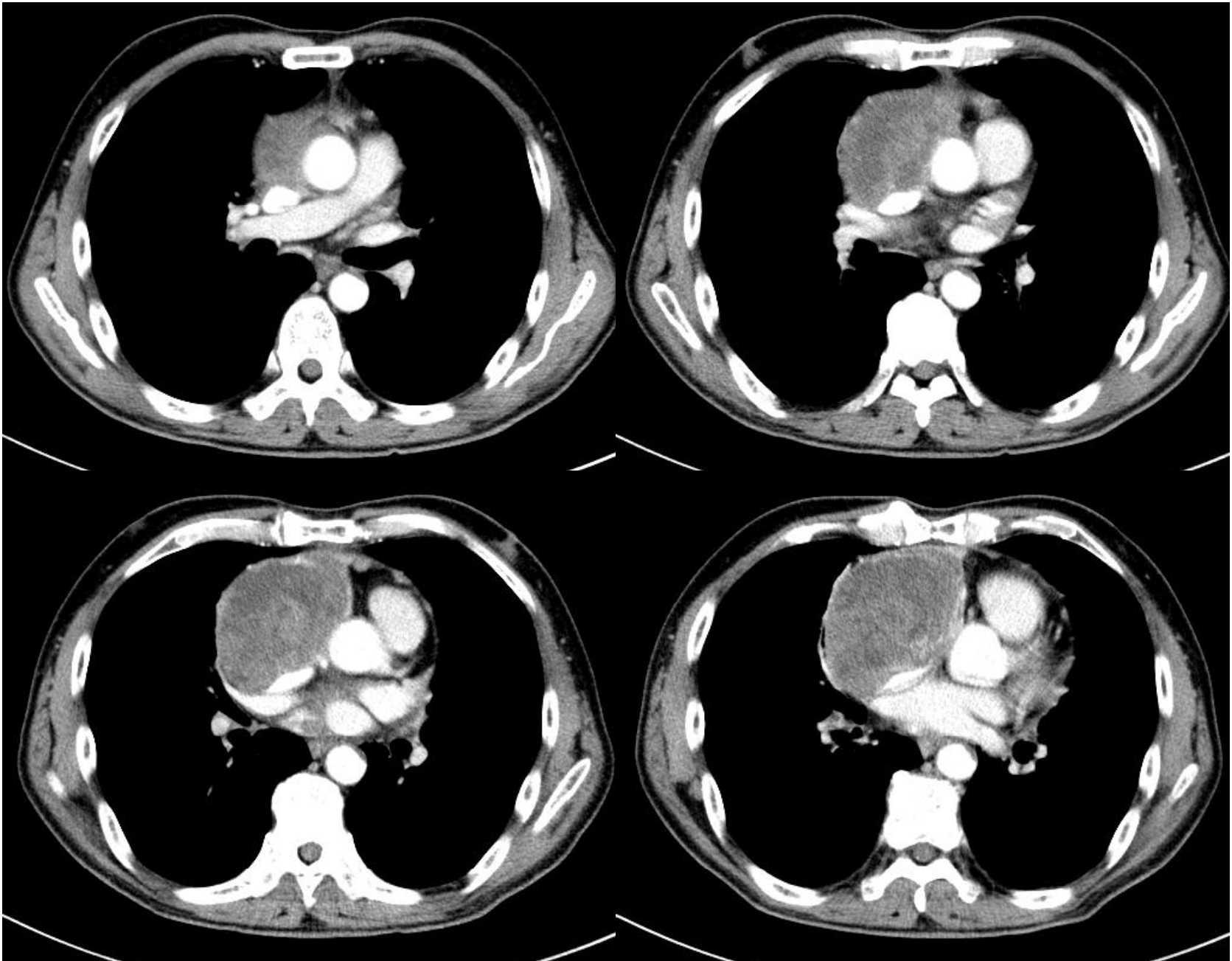
SCC(TA4) 1.09 ng/ml (<1.5)

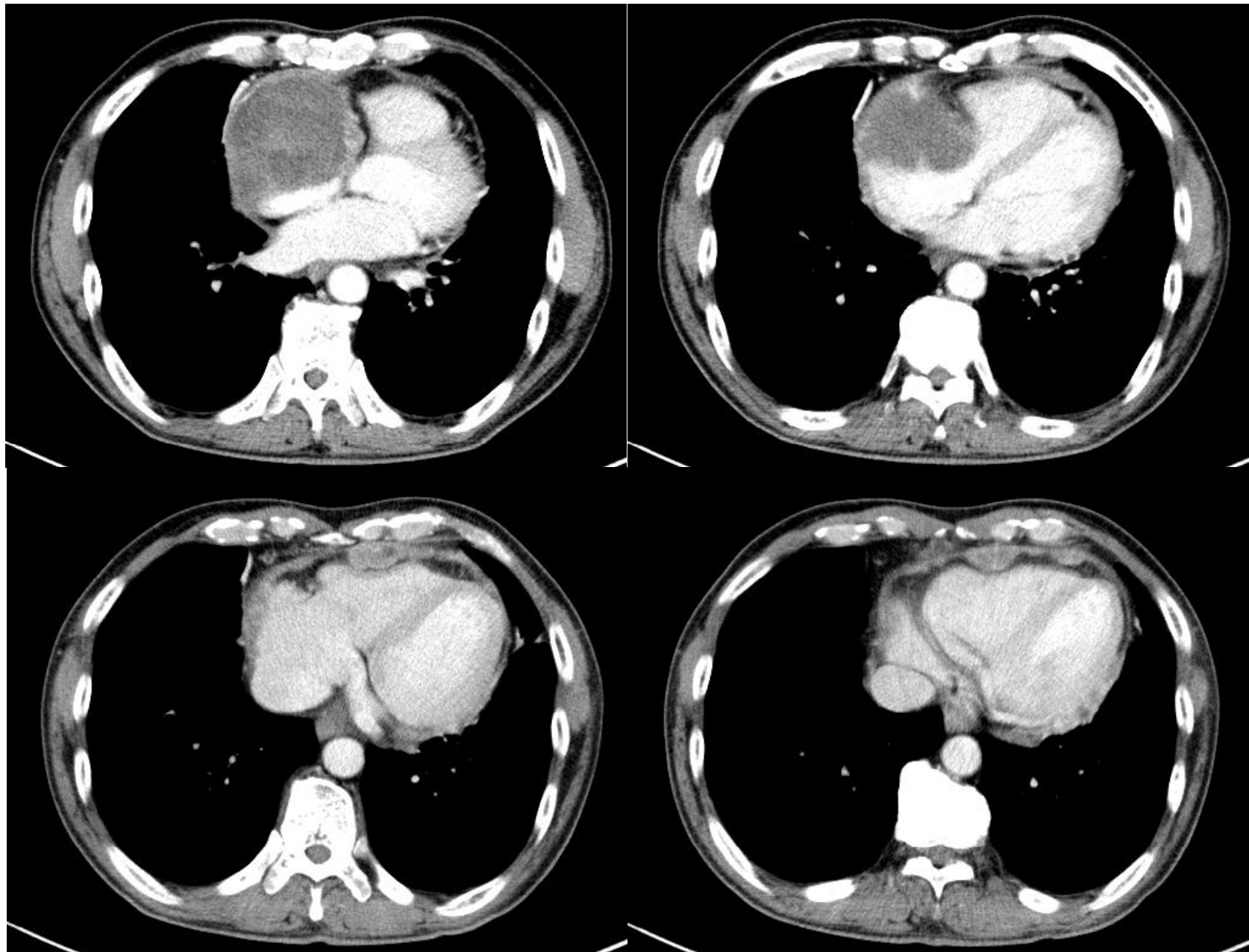
b-HCG 1.52 mIU/ml (<10)

Clinical course (I)

- Chest CT
- CT-guided biopsy
- PET- CT, Bone scan
- Brain MRI

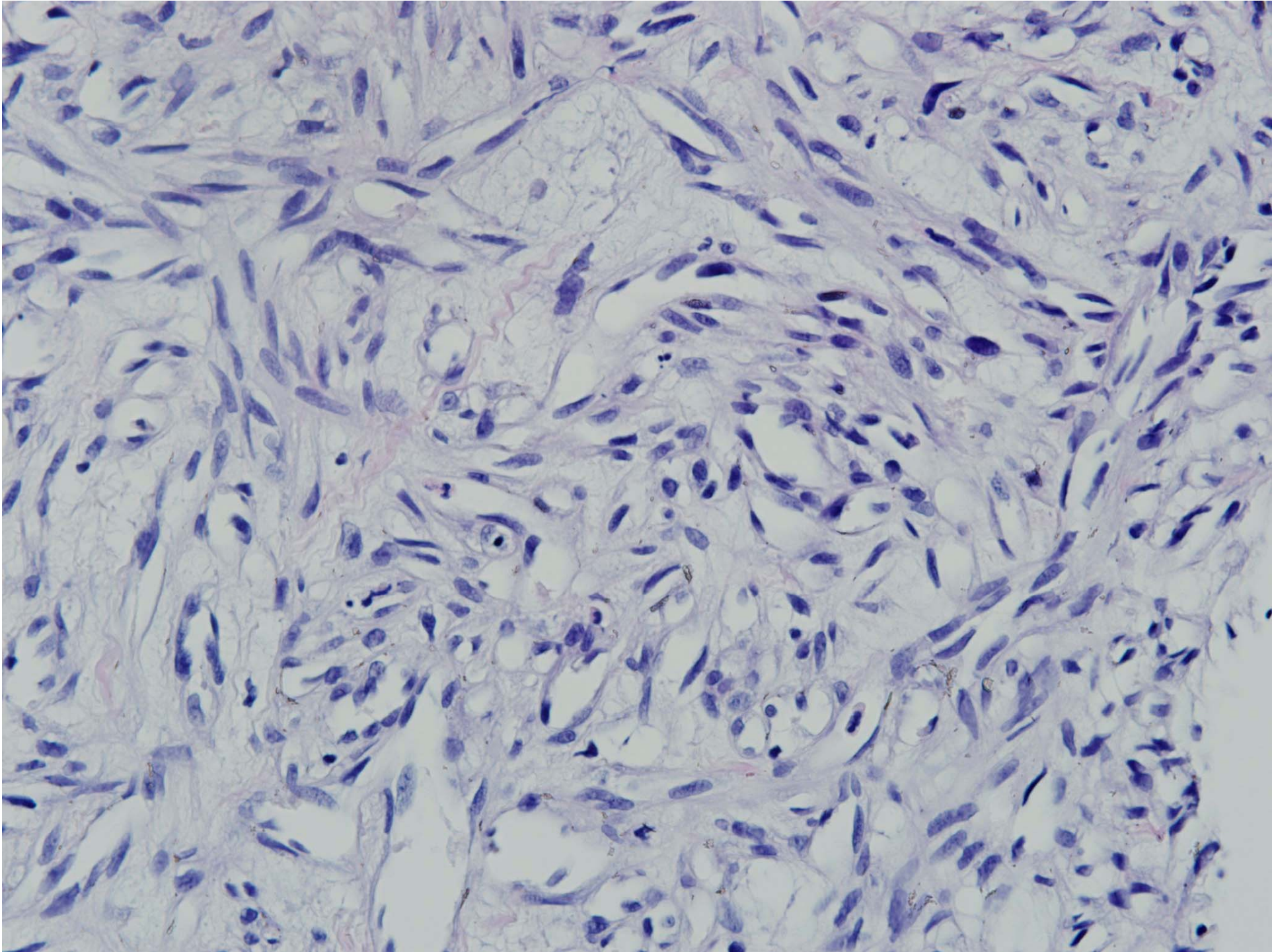


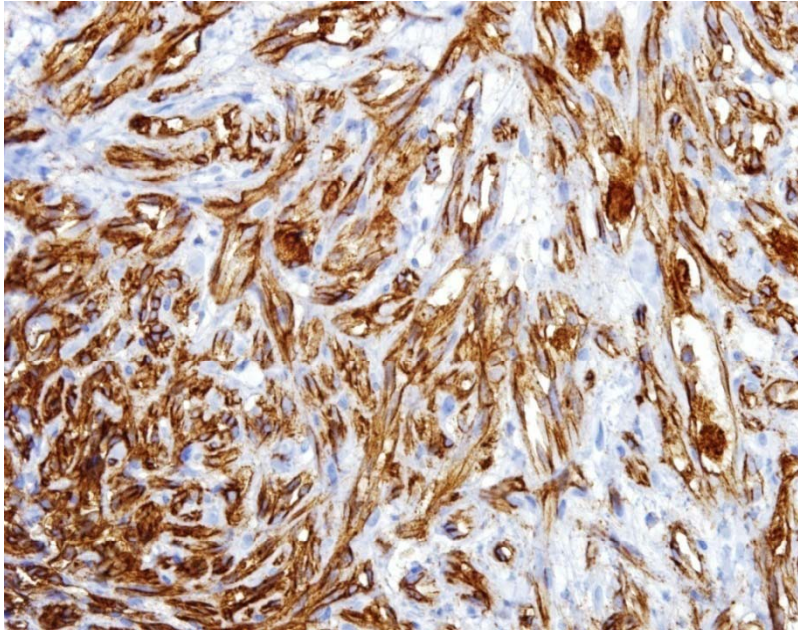




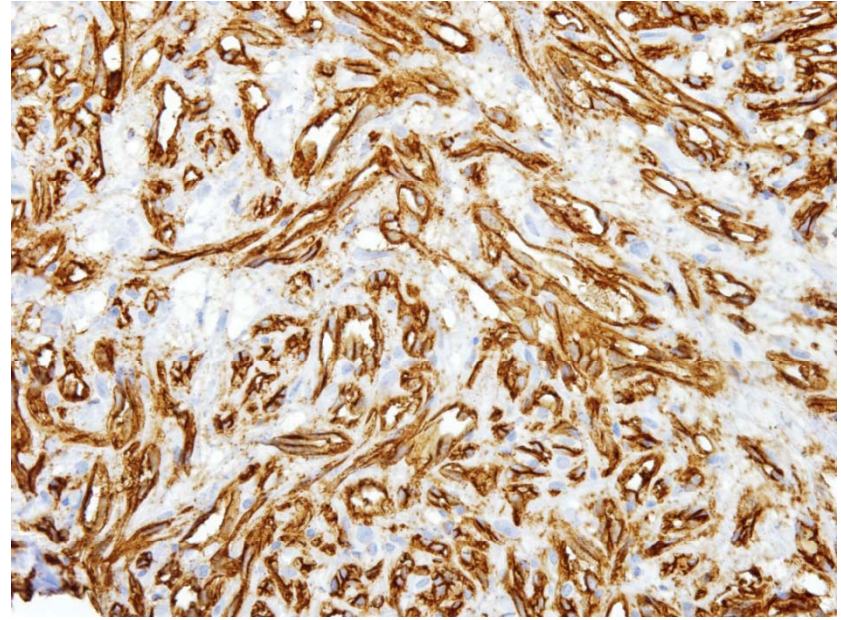


- 조직 검사 결과

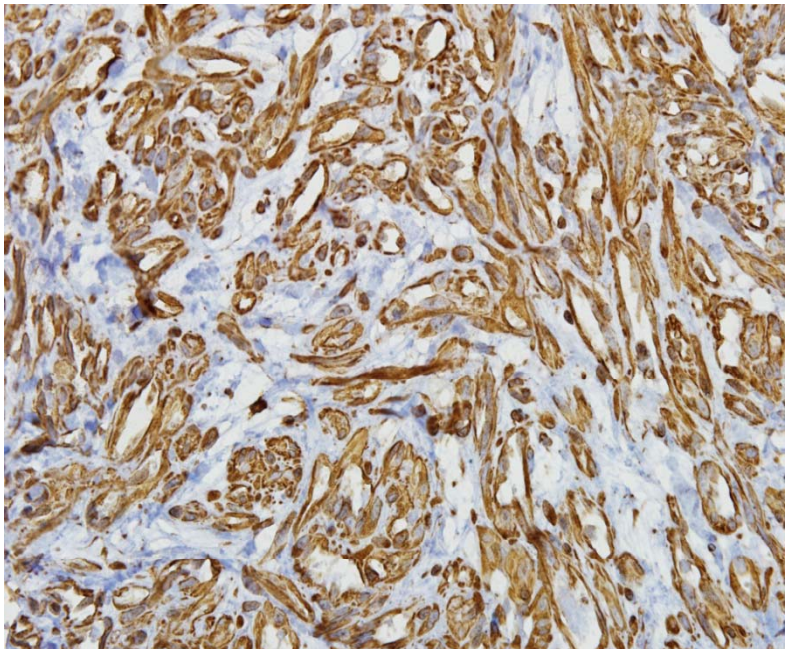




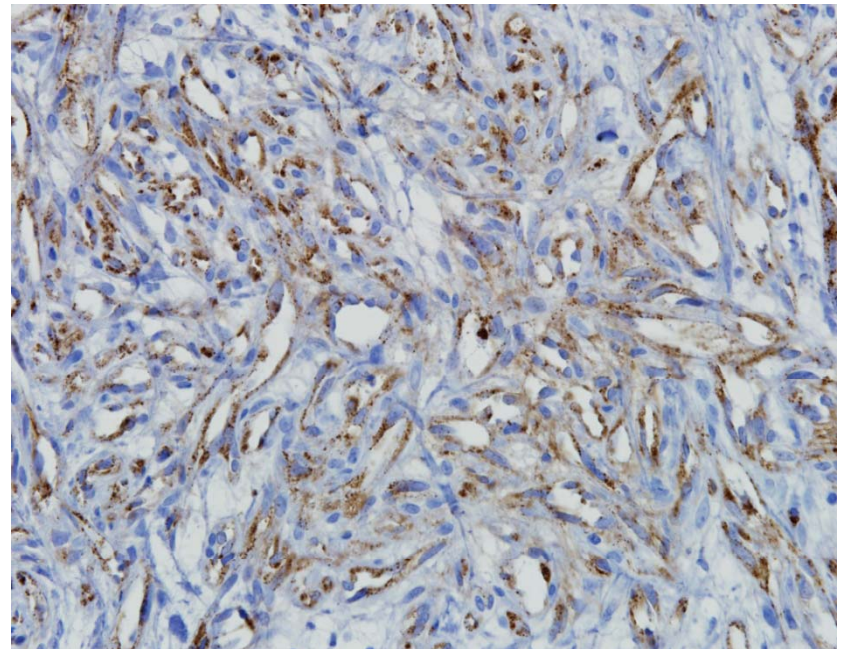
CD 31



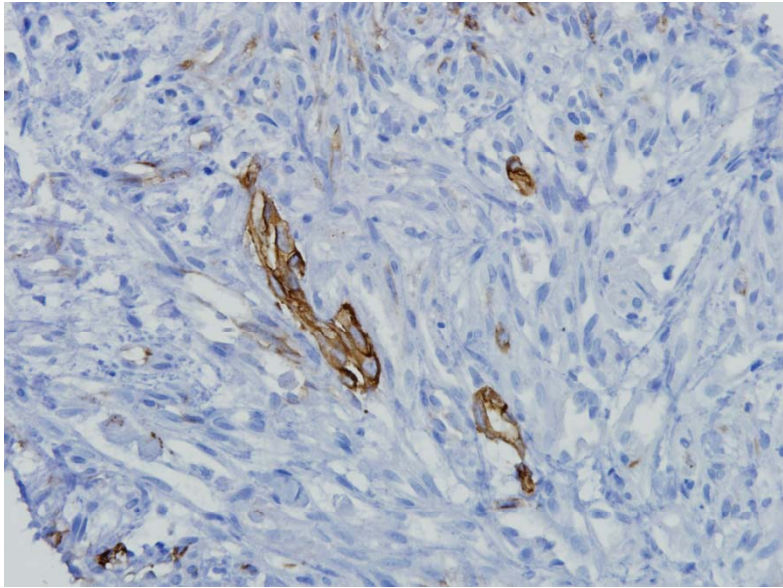
CD 34



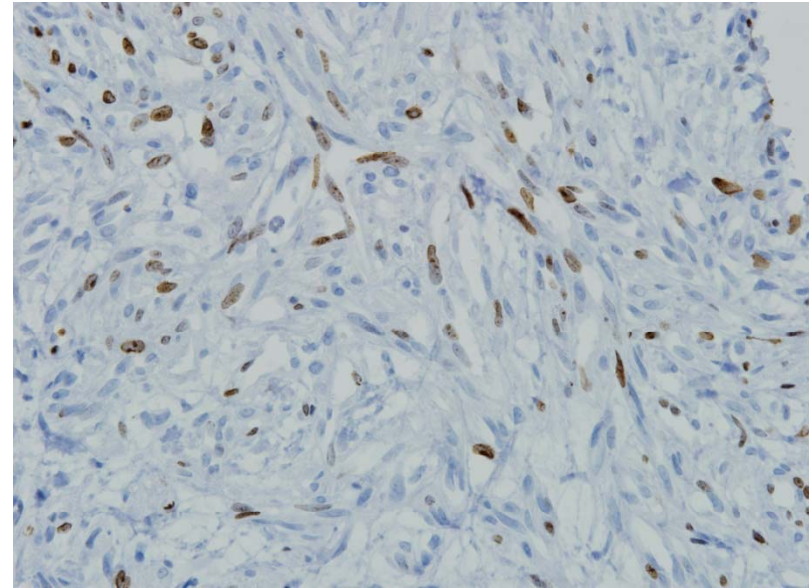
Vimentin



Factor 8



D240



Ki 67

Clinical course (II)

- Radiotherapy (25회, 5600cGy)
- Chemotherapy- 1st line MAID
(Mesna, Adriamycin, Ifosphamide, Cisplatin)
- Nadir care with Multifocal pneumonia
- Thrombocytopenia 지속되어 항암 치료 중단
- Sudden cardiac arrest로 진단 5개월 뒤 expired.

REVIEW

**PRIMARY ANGIOSARCOMA OF THE
ANTERIOR MEDIASTINUM**

- uncommon tumor- less than 1% of all sarcomas
- 발생 부위
 - cutaneous tumor in scalp or facial regions
 - soft tissue, breast, visceral organs, bone
- 원인
 - sporadic
 - predisposing conditions
 - : radiation, chronic lymphedema,
 - environmental carcinogens (vinyl chloride or thorotrast)
- 평균 연령: 52 years
- 예후
 - poor with median survival of 42 months
 - 5 year overall survival of 43%
 - important prognostic factor : primary site (liver, heart vs soft tissue, skin)

Primary angiosarcoma of the Anterior mediastinum

- less than 25 cases reported so far
- symptoms: chest pain, dyspnea, cough
- age: 25~62 years, mean age of 40.7 years
- Histology: low grade neoplasms with definitive vasoformation to high grade lesions with solid growth pattern and vast necrosis
- Immunohistochemistry
 - positive vascular markers- factor VII related antigen, CD34, & CD31
 - all negative for CAM5.2
- survival: 2~36 months, less aggressive than angiosarcomas in other locations (deep soft tissue, heart)

Table 2 Clinical features of 9 patients with angiosarcomas of the anterior mediastinum

Case	Sex	Age (y)	Size	Clinical manifestations	Treatment	Follow-up
1	M	34	NA	Chest pain, dyspnea	Resection and chemotherapy	Alive at 36 mo
2	F	39	3 cm	Hemorrhagic pericarditis	Resection	Alive at 10 mo
3	M	25	5 cm	Chest pain, dyspnea	Resection	NA
4	M	40	NA	Pneumonia	Resection and chemotherapy	Alive at 6 mo
5	F	30	3.5 cm	Swelling face/neck	Resection	Alive at 12 mo
6	F	42	NA	Dizziness	Resection	Deceased at 10 mo
7	F	45	12.5 cm	Chest pain, dyspnea	Resection	NA
8	M	62	7 cm	Cough, fever	Resection and chemotherapy	Alive with recurrence at 48 mo
9	M	49	NA	NA	Resection	NA

Abbreviations: M, male; F, female; NA, not available.

- tumor recurrence: at least 20% of cases

- differential diagnosis
 - 1) Epithelioid hemangioendothelioma
 - 2) Carcinomas
 - 3) Hemangioma

- May occur in association with mediastinal germ cell tumors
 - Grave prognosis with early local recurrence and metastasis
 - Survival: 9~33 months

- Treatment:
 - surgical excision
 - adjuvant therapy – chemo & radiation