



Case Report

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報告者：Intern G 組 張啟源、鄧聖霖、戴宇昀、何盈興

General Data

- Name : 蔡昇峰
- Gender : male
- Age : 23
- Native : Taiwan
- Occupation : 勞工
- Attending V.S. : 王文岑醫師
- First visit : 2007/02/14

Chief Complaint

- Pain over L't lower molar area since February 2007.

Present Illness

- This 22 y/o male suffered from episode for 2~3 days. He said his tooth fractured during chewing. Then teeth over L't lower posterior area became pain .He came to LDC, then the doctor suggested him to our OPD for further exam.
- OPD had biopsy of L't edentulous ridge showed osteomyelitis(2.14.2007)and inflammatory fibrous hyperplasia(2.23.2007). Clindamycin was prescribed.
- However, he felt teeth pain aggravated. Biopsy was performed again over bilateral mandible and maxilla(3.13.2008).

Past History

■ Past Medical History

- Aspirin allergy

■ Past Dental History

| 日期 | CC | Dx | Specimen |
|---|--------------|---|--------------------------|
| 20070214 | L't Md. pain | Osteomyelitis, 35,36 | <input type="checkbox"/> |
| 20070221 | | Extraction of Retained dental root (distal root of 36) | <input type="checkbox"/> |
| 20070227 | | Other disturbances of oral epithelium, including tongue | |
| 20070416 | | Periodontitis | |
| 20070418、25 | | Periodontitis | |
| H-P: Ulcer with subacute inflammation (edentulous ridge of 36) Inflammatory fibrous hyperplasia (edentulous ridge of 36) | | | |

Personal History

- Alcohol : (+)
- Betel nut : (+)
- Cigarette : (+)
 - 1 package / day

Intraoral Examination

- 16 Elongation
- 16 Root exposure
- 16 17 Dehiscence
- Gingival swelling
- Gingival inflammation
- Alveolar bone resorption



2008.03.13

Intraoral Examination (cont.)

- 17 un-healing tooth socket located between tooth 16 &18 measuring 1.5X1.5cm
- Color : pink
- No pus discharge
- Tooth 15 lingual tipping

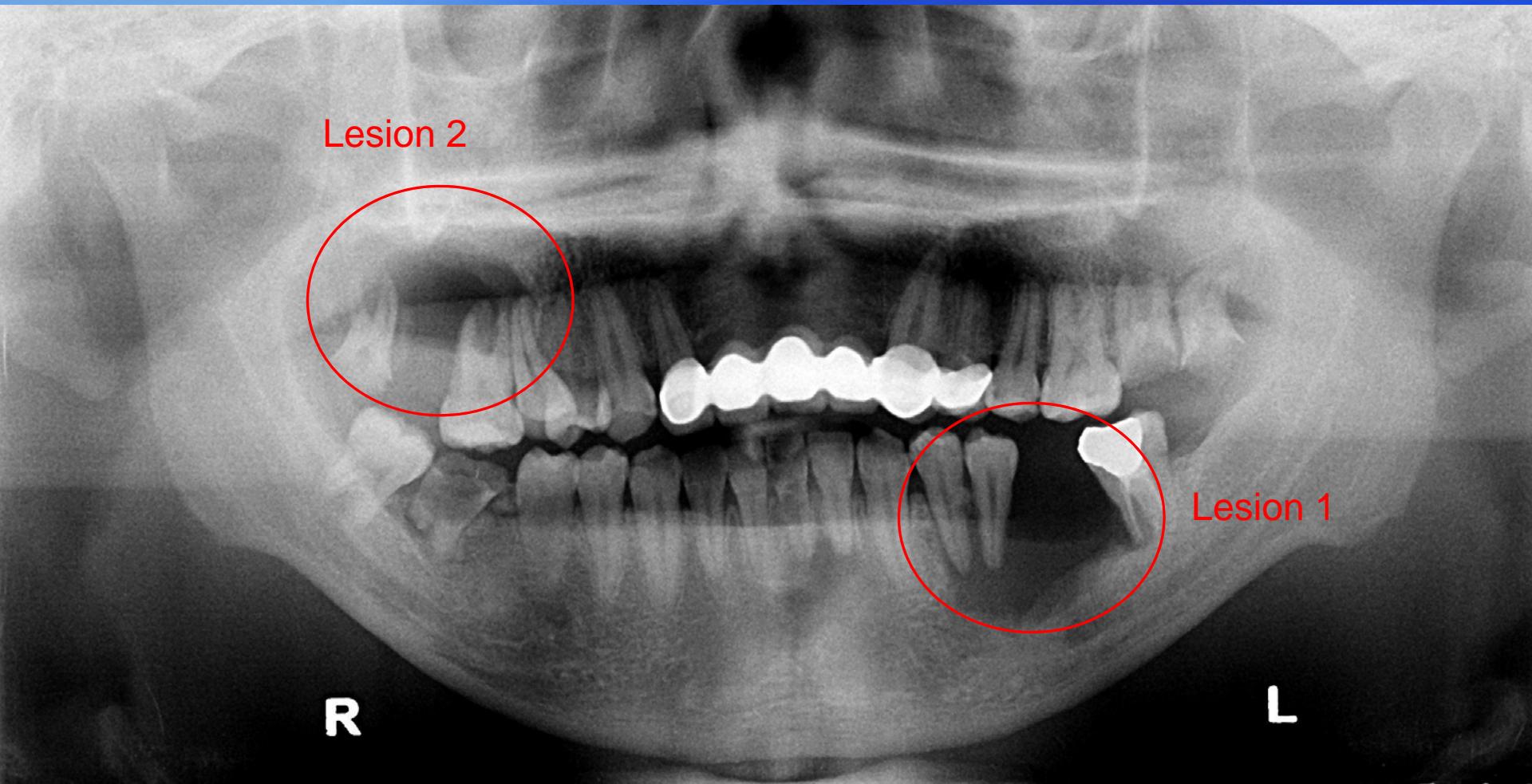


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Physical Examination

- Pain (+)
- Swallowing pain (-)
- Fever or local heat (-)
- Indurations (?)
- Tenderness (?)
- Lymphadenopathy (?)

X-ray finding : Panorex



2008.03.13

X-ray finding Panorex (cont.)



- **Lesion 1** is located in the L't mandibular ramus
- There is an **ill-defined and irregular radiolucency** without a corticated margin over the left mandibular body extending from **37** distal root mesial aspect to **34** root and extending from alveolar ridge down to mandibular canal measuring **4X2.5 cm**
- No root resorption.
- **Tooth floating in the air** over tooth 34 35
- **PDL destruction** over 34 35

X-ray finding Panorex (cont.)



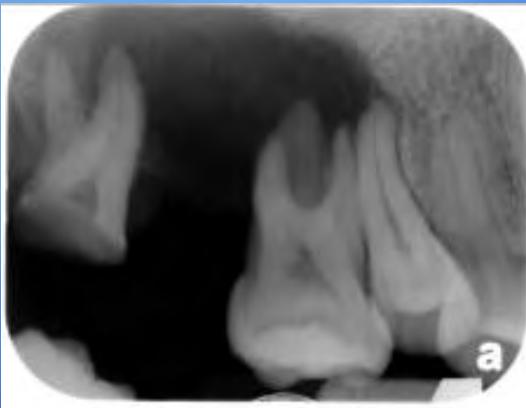
- **Lesion 2** is located over R't maxilla tuberosity
- There is an **ill-defined and irregular radiolucency** without a corticated margin over R't maxilla tuberosity extending from tooth 18 distal buccal root to 15 root mesial aspect and extend from hard palate down to 16 furcation, measuring about 3X1.5 cm
- No root resorption but 16 elongation
- PDL destruction over tooth 16

Dental X-ray finding

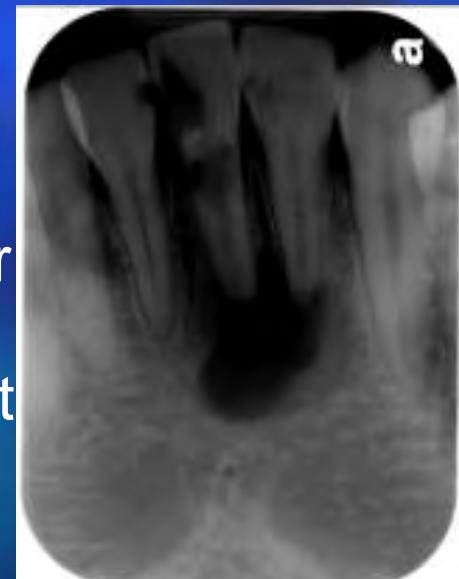


- Missing tooth: 11 21 22 17 36(R.R. 2007.02.21) 38 48
- residual root: 46
- caries:18 27 28 47
- periodontal condition: poor
- endodontic condition:37
- restoration (e.g. C & B):12XXX2324
- filling: 16 25 26 resin filling ,37 amalgam filling
- Other dental finding : 47 distal root resorption

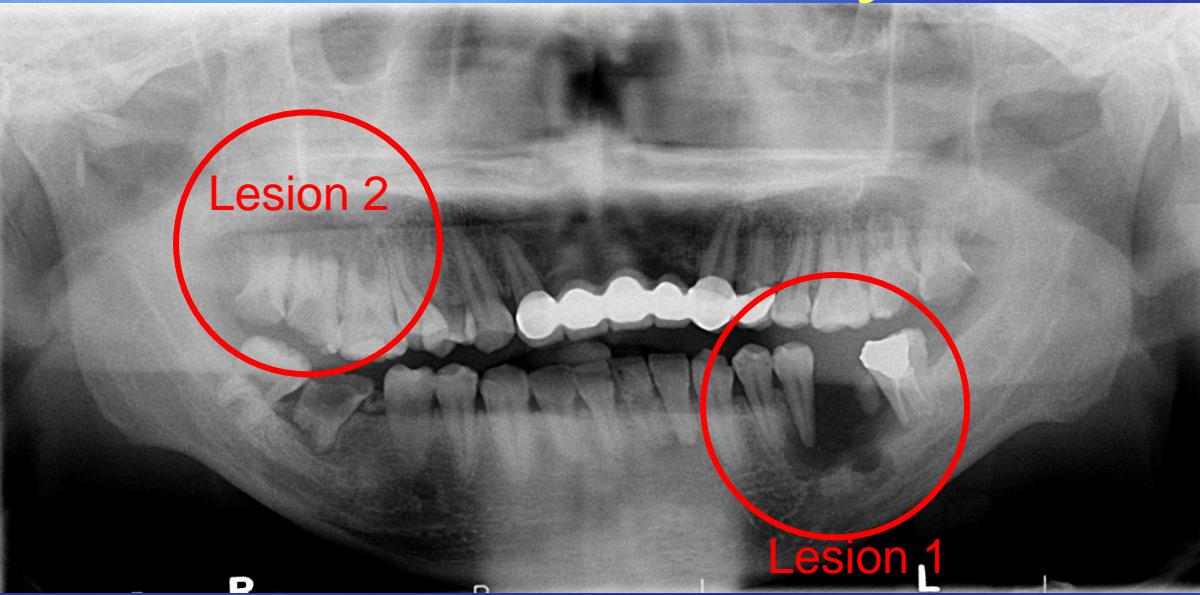
X-ray finding : Periapical film



- Tooth floating in air over tooth 16
- PDL destruction over tooth 16 31 32
- PDL widening over tooth 15
- There is an **ill-defined and irregular radiolucency** without a corticated margin over mandibular symphysis extending from tooth 31 root mesial aspect to 32 root distal aspect and extending from 31 root apex down to mental spine ,measuring about 1X1cm. Internal root resorption of 31 was noted.

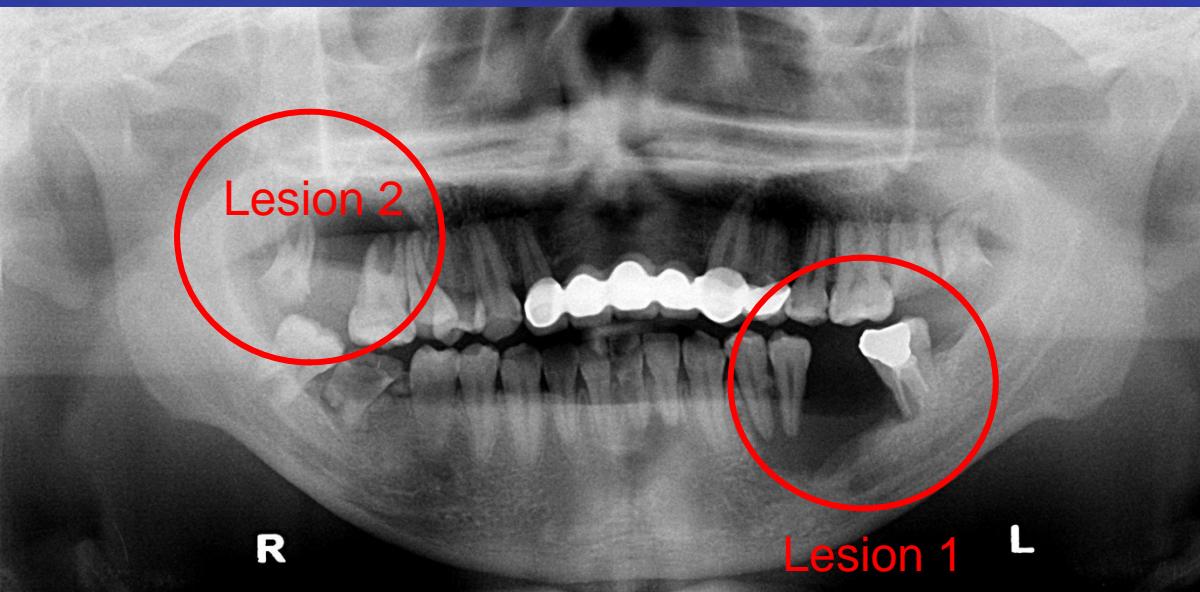


X-ray finding



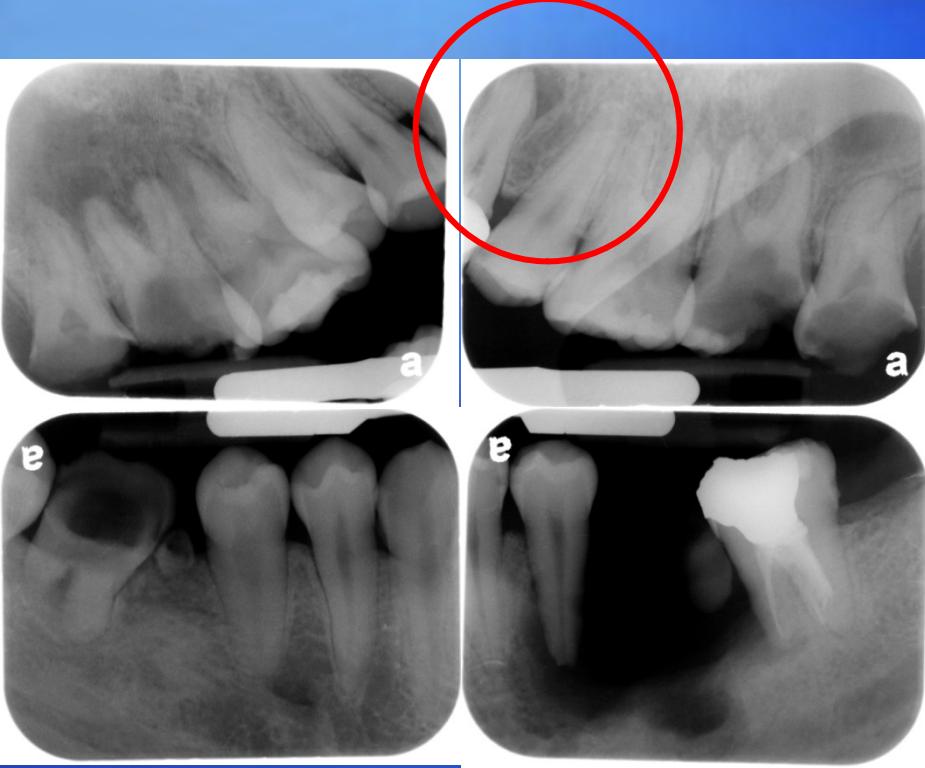
Lesion 1 :
34 floating in air
Bone remodeling

Lesion 2 :
17 missing



R

Lesion 1 L



2007.02.13



2008.03.20

X-ray summary

- RL with **ill-defined margin** over 34-37 area
- **Bone remodeling** ability over 34-37 can be seen
- Incisor lesion – **PDL remained** upon 2/3 root length
- **24** apex area bone density decreased
- 16-18 area bone density decreased
- -- **Multiple area**
- -- **Ill-defined margin**
- -- **Tooth floating in the air** – PDL disappear
- -- **Bone remodeling character**

Differential diagnosis

1. Disease origin : Bony or periodontal origin
2. Infection or neoplasm
3. Benign or malignant

Neoplasm or Infection ?

- Fever or Local heat : (-)
- Pus discharge : (-)
- Duration : 14 months
- Lymphadenopathy : (?)
- Induration : (?)



Neoplasm

Benign or malignant?

- Margin : poor-defined
- Pain : (+)
- Ulceration: (+)
- Duration : 14 months⁺



Malignant

Working diagnosis

1. Multiple myeloma
2. Langerhan cell disease
3. Metastatic carcinoma

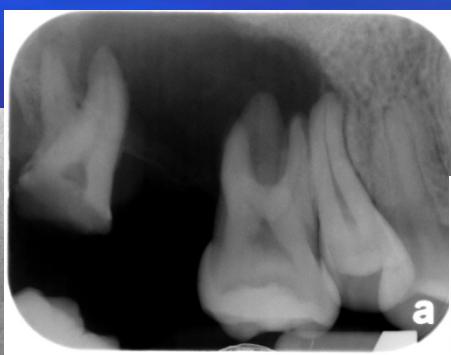
Multiple myeloma

| | Our case | Multiple myeloma |
|-------------------|----------------------------------|---|
| Gender | Male | |
| Age | 23 | 35-70 y/o (60 y/o average) |
| Frequency | Contineous pain | |
| Symptom & Sign | Dull bone pain Tooth mobility | Bone pain, Bone swelling Pain paraesthesia Tooth mobility |
| Location | L't ramus , R't tuberosity | Jaw bone (30%) |
| Size | 4x2.5cm , 3x1.5cm | |
| Number | 3, Multiple | Multiple |
| Margin | Ill-defined | Well-defined |
| Shape (X-ray) | Radiolucency | Punched out radiolucency |
| Tooth involvement | Floating in the air | |

Multiple myeloma



Our case



R

L

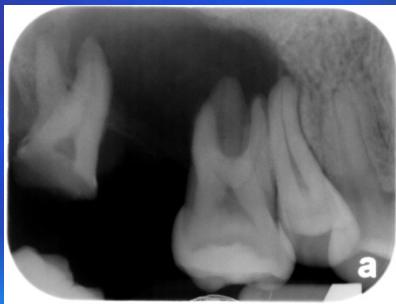
Langerhan cell disease

| | Our case | Langerhan cell disease |
|-------------------|----------------------------------|---|
| Gender | Male | Male prediction |
| Age | 23 | < 10 y/o (50%), All aged |
| Frequency | Contineous pain | |
| Symptom & Sign | Dull bone pain Tooth mobility | Dull pain Tenderness |
| Location | L't ramus , R't tuberosity | Mandible posterior |
| Number | 3, Multiple | Monostotic, polyostotic Osteolytic bone lesion |
| Margin | Ill-defined | No corticated rim Ill-defined radiolucency |
| Shape (X-ray) | Radioluency | punched out radiolucency Scoope out |
| Tooth involvement | Floating in the air | Floating in the air Tooth mobility, loss Severe periodontitis |



Langerhan cell disease

Our case



Metastastic tumor

| | Our case | Metastastic tumor |
|-------------------|----------------------------|------------------------------|
| Gender | Male | Male inclination |
| Age | 23 | Middle age to older adult |
| Frequency | Contineous | Unknown |
| Symptom & Sign | Dull bone pain | Mucosa ulceration |
| Location | L't ramus , R't tuberosity | Gingival>50% Tongue 25% |
| Number | 3, Multiple | Uncertain |
| Shape (X-ray) | Radiolucency | Ill-defined bony destruction |
| Tooth involvement | Floating in the air | uncertain |

◎ But p't didn't have medical history of origin primary tumor

Clinical impression

Langerhan cell disease

Other test and examination:

※染色體檢查報告：

Date : 2008/4/21

Specimen site: Buccal mucosa

Result : No chromosome abnormality
was found

Biopsy :

Date: 2008/3/27

Site: bilateral maxillary & mandibular: A 34-36 area;
B14-16 area

Pathologic diagnosis: A &B all showed Langerhan cell
disease with feature of lymphoproliferative disorder

Date: 2008/4/24

Site: bilateral maxillary & mandibular: A 34. 35 area;
B15,16 area

Pathologic diagnosis: A &B all showed Langerhan cell
disease with feature of lymphoproliferative disorder

MRI examination(2008/4/9):
Tc -99m MDP whole body bone scan

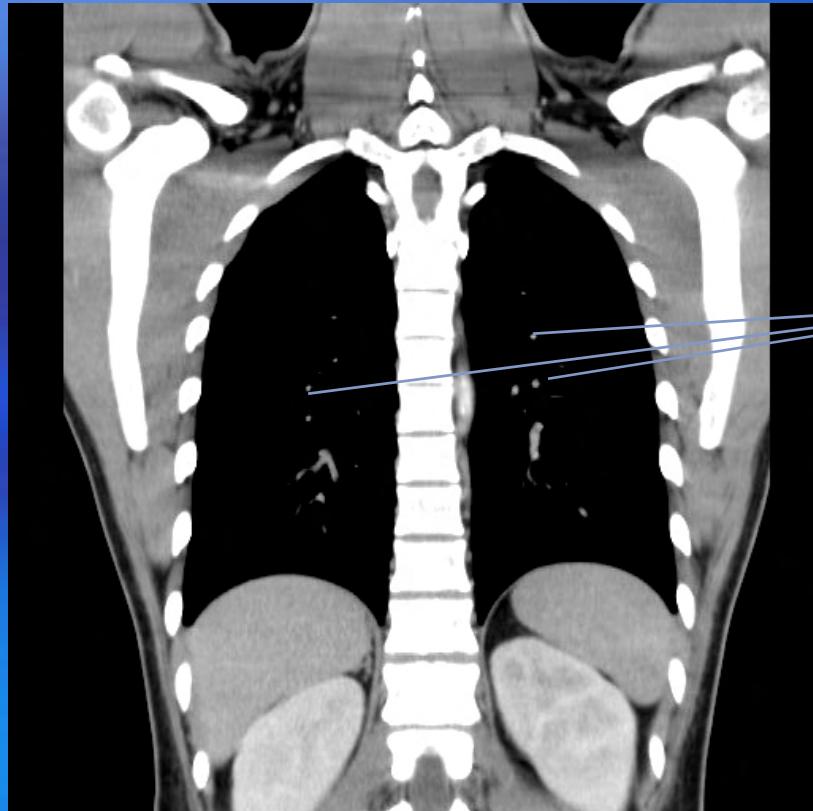
Impression:
High probability of local bone invasion
from oral cancer to facial bones and
distant bone metastasis to spine

Chest X-ray examination (lung windows) 2008/4/21

Specific findings:

Multiple lung cyst (multiple cyst)

Compatable with langher cell hisiocytosis



Lung cyst

Final diagnosis:

Langerhan cell disease

References

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- Langerhan cell granulomatosis with unusual FNAC findings. SenGupta SK, Vince JD, Chakravorty P, Sinha SK. Department of Pathology, Faculty of Medicine, University of Papua New Guinea, Papua New Guinea.
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Thanks for your attention