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A Case of Paragonimiasis that was Suspicious for a Lung Malignancy by PET/CT

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Positron emission tomography/computed tomography (PET/CT) is valuable for the diagnosis of malignancies. However, PET/CT is unable to discriminate exactly between inflammation and a neoplasm. We report a case of a 50-year-old man with pulmonary paragonimiasis that was suspicious for lung cancer, as detected by PET/CT. The use of PET/CT revealed multilobulated consolidation on the right lung and patchy consolidation on the left lung, with increased fluorodeoxyglucose (FDG) uptake. In addition, the left paraaortic lymph node (LN) and peripancreatic LN showed enlargement with increased FDG uptake. Lung cancer with multiple lymph node metastases was suspected from the increased standardized uptake values (SUV>4.5) determined by PET/CT. We performed wedge resection via video-assisted thoracic surgery (VATS) and found *Paragonimus westermani* eggs in the involved tissues. (*Tuberc Respir Dis* 2007;63:521-525)

Key Words: *Paragonimiasis*, PET/CT, Lung, VATS

서 론

¹⁸F-fluorodeoxyglucose (FDG) PET/CT (positron emission tomography/computed tomography)

증 례

환 자: 50

주 소:

현병력: 6

FDG 가 , 1~2

가
PET/CT

가가 PET/CT

10

6

4

과거력: 5 , 3

개인력: 8

진찰소견: 140/90 mmHg, 80 / ,

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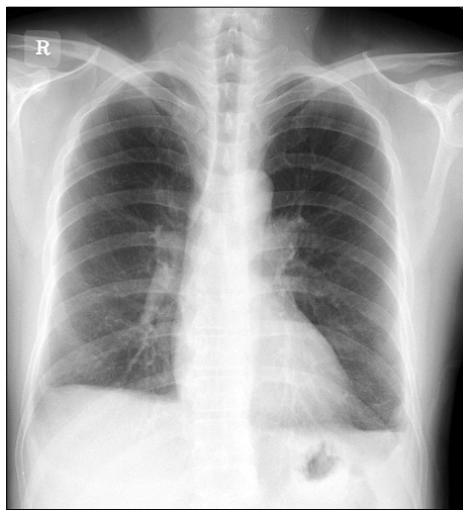


Figure 1. Chest PA shows both costophrenic angle blunting.

20 / , 36.6°C .

검사실 소견: 10,170/mm³
 (12%, 1,220/mm³), 15.5 g/dl,
 269,000/mm³ .
 7.6 g/dl, 4.0 g/dl, AST/ALT 23/29 IU/L,
 0.5 mg/dl, 17 mg/dl,
 1.4 mg/dl, C-reactive protein(CRP) 0.36 mg/dl .
 CEA, α FP, CA19-9, PSA

(12%) . ,
 (FVC) 3.33 L (82%), 1

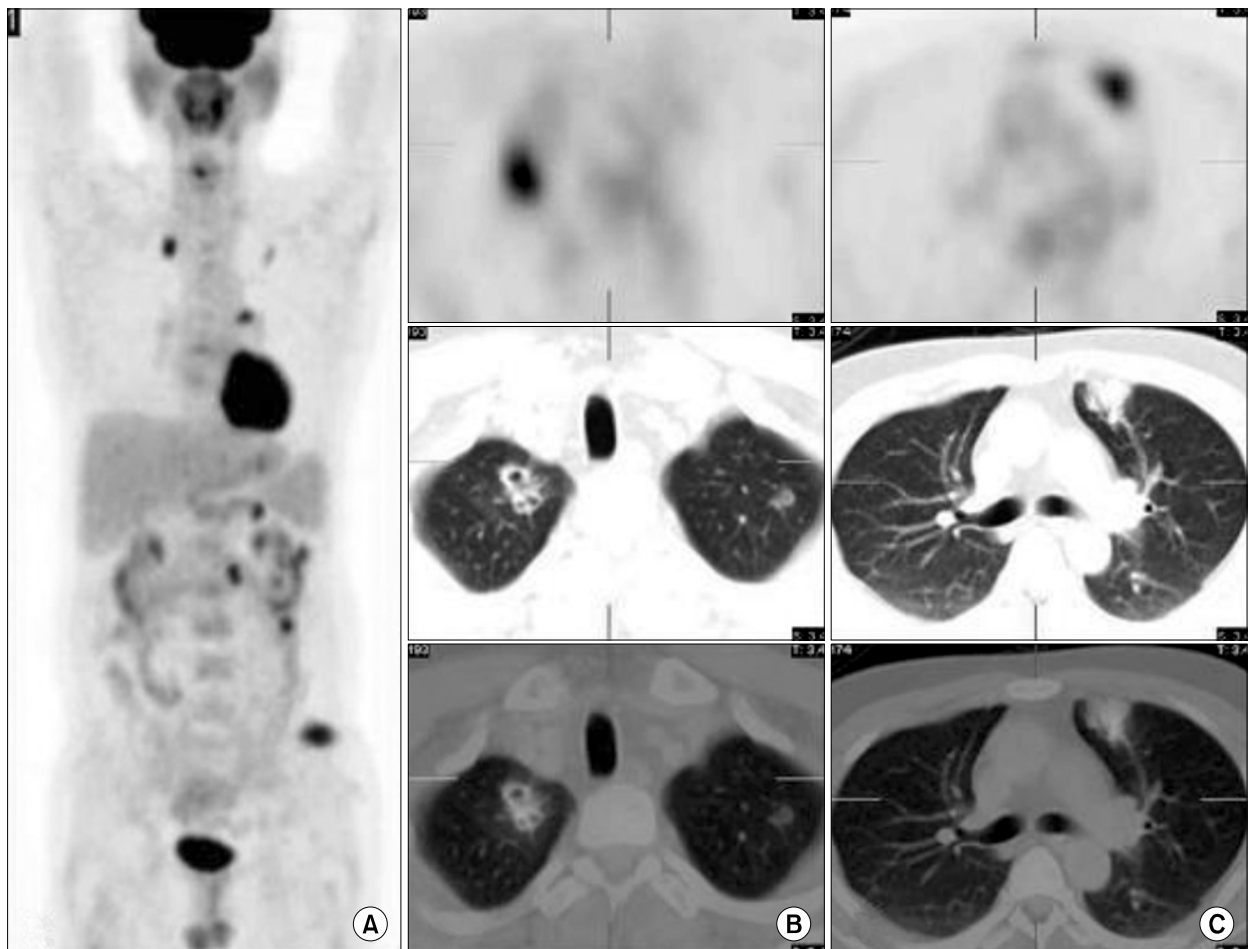


Figure 2. Coronal PET maximum intensity projection image (A) shows multiple increased FDG uptake at whole body. Transverse PET image (upper row), transverse CT lung window image (middle row) and transverse PET/CT image (lower row) show multilobulated consolidation, increased FDG uptake at both upper lobe (B), left upper lobe lingular division (C).

(FEV₁) 2.68 L (88%), FEV₁/FVC 80% 임상경과: PET/CT
50
방사선 소견: X- . 3
(Figure 1). PET/CT
20×12 mm (standardized
uptake value, SUV) 5.4
32×25 mm FDG 가
(SUV: 4.64) , (Figure 4). Enzyme-linked immunosorbent
(SUV: 2.33) (Figure 2). FDG assay (ELISA)
가(SUV: 4.64~5.01) *Paragonimus*
FDG kg 1 3 , 2 . Praziquantel 25 mg/
가(SUV: 5.31) . 5
(lung-to-lung metastasis)
가 (Figure 3). (3.2%, 230/mm³). 가

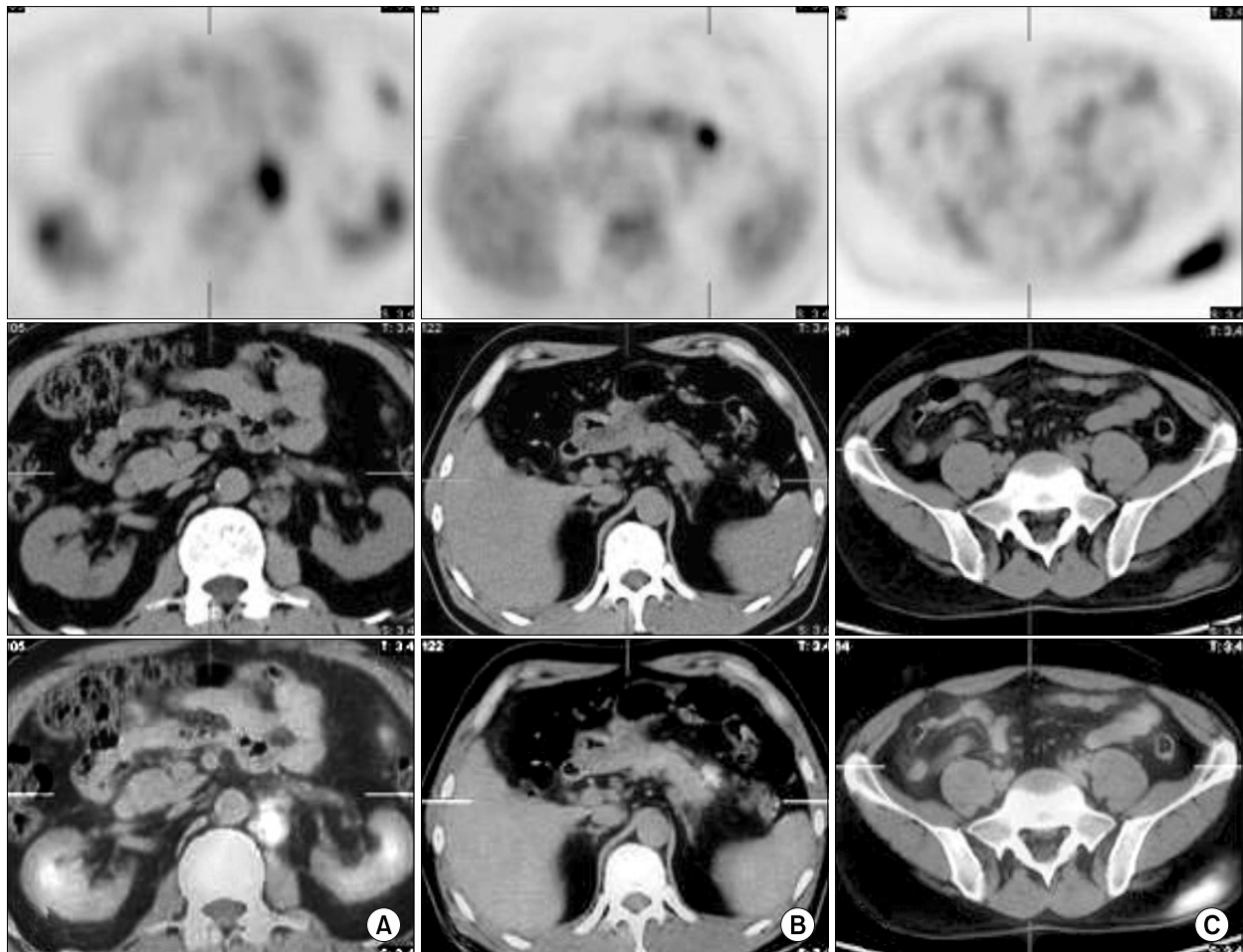


Figure 3. Transverse PET image (upper row), transverse CT image (middle row) and transverse PET/CT image (lower row) show left paraaortic lymph node (A), peripancreatic lymph node enlargement (B) with increased FDG uptake (SUV: 4.64~5.01) and fat infiltration with FDG uptake (SUV: 5.31) at left buttock area (C).

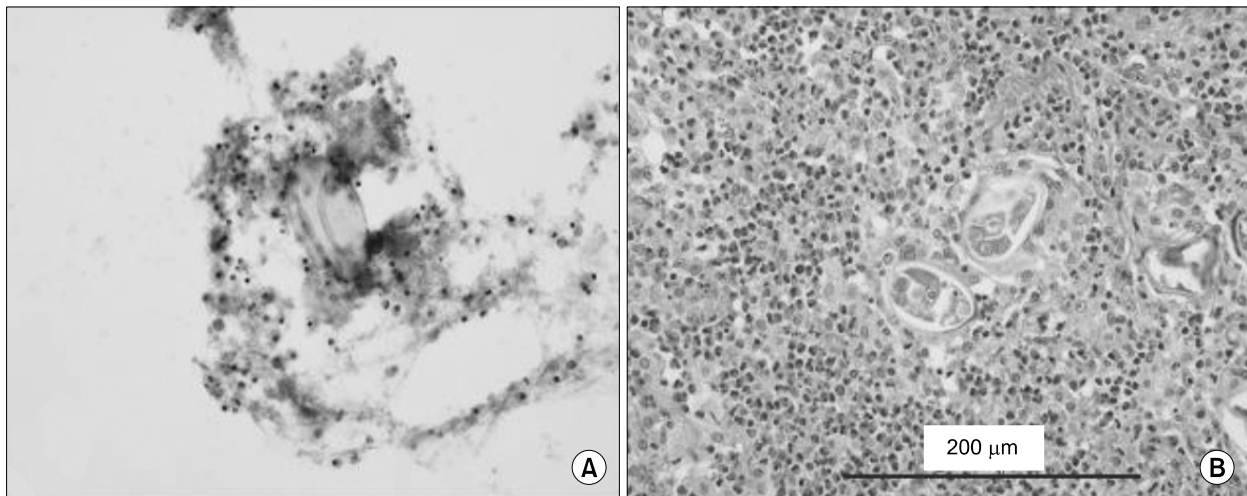


Figure 4. Expecterated sputum after bronchoscopy shows yellowish refractile eggs (H&E stain, $\times 100$) (A), Excised lung shows distorted golden brown eggs (about $65 \times 40 \mu\text{m}$) in eosinophil-rich exudates (H&E stain, $\times 400$) (B).

고 찰

1828 Naterer가 , 40% 가
1878 Kerbert가 . 30%
41%, 13%, 1%
CT X-

Westerman Distoma westermani , 6
1899 Paragonimus westermani 가
1. .

Paragonimus
westermani (, , ,
) ,
,
1 cm
, 1 cm
3 .

FDG-PET 가
SUV 2.5
4 .
PET
FDG 가 . FDG
가 가 5 .
가 . ,
X- , 72% 28% X- , 6-11 .
2 . X- 75%, 63%
FDG-PET/CT 가 .

가
ELISA
8,12,13
가
가
50
PET/CT
가
가
50
PET/CT
2003 Watanabe FDG-PET
3
6-8
PET/CT FDG 가
요 약
FDG-PET/CT
가
PET/CT
FDG

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