#### Manuscript preparation in English

- 1. Name, affiliation
- 2. Chief complaint, brief history
- 3. Radiologic finding
- 4. Answer
- 5. Brief discussion
- 6. References

### Figure preparation

- 1. JPG format
- 2. Trimming of margin
- 3. File size: larger than 300X300 pixels, smaller than 1000x1000 pixels (Maximum file size for one image: One megabite)

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\*간혹 워드에만 이미지를 붙여 주시는 경우가 있어 말씀 드립니다. 이미지는 워드에 붙여 주시는 것 외 개별 파일로 따로 보내주십시오. 감사합니다.

## **Template for Manuscript**

Kyung Hee Lee, Bundang Seoul National University Hospital

# History

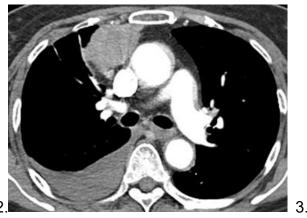
61/F

Right shoulder pain

## **Radiologic Findings**



1.





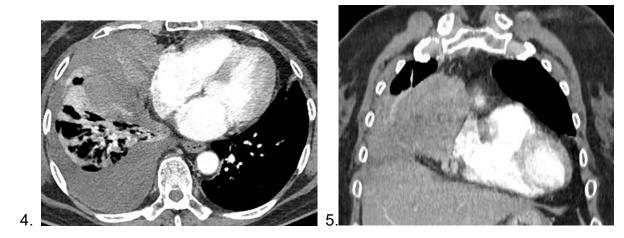


Fig 1. Chest PA shows mass like consolidation in right lower lung zone with right pleural effusion.

Fig 2-4. CT scans reveals an anterior mediastinal mass with invasion to right side of pericardium and heterogeneous enhancement (average HU 80). Pleural effusion without definite enhancement is seen in right hemithorax with passive atelectasis of right lower lobe.

Fig 5. This lesion is measured about 7.7 X 5.6 cm in diameter on coronal image.

## Thymic neuroendocrine tumor (carcinoid)

#### **Brief Discussion**

Atypical carcinoid tumor is an extremely rare (0.18 per 1,000,000 population) and characterized by a high degree of malignancy and invasiveness without specific clinical features. The clinical manifestation includes no obvious early symptoms(1/3), nonspecific symptoms such as cough, chest pain, breathing difficulties, and other symptoms related to the anterior mediastinal space-occupying lesions, or carcinoid syndrome related to the tumor producing ectopic hormones, such as serotonin(2% of patients) or adrenocorticotropic hormone(25% of patients). This tumor exhibits local recurrence or distant metastasis.

On CT images, a large mass with an irregular or lobulated shape in the mediastinum close to blood vessels or surrounding pericardium and immature blood vessels, and liquefied necrotic area within the tumor may suggest atypical carcinoid tumor. Due to lack of specificity of radiologic finding, histological evaluation is needed for final confirmation. The differential diagnosis of the atypical carcinoid tumor includes all kinds of primary mediastinal tumors, principally lymphoma, germ cell tumors, parathyroid

adenoma or carcinoma, pericardial cysts, and metastatic tumors with other origins.

Recommended treatment of resectable atypical carcinoid tumor is completely surgical resection. And for unresectable case, chemotherapy with or without radiation therapy is recommended.

#### References

1. Zhu S, Wang Z-T, Liu W-Z, Zong S-X, Li B-S. Invasive atypical thymic carcinoid: three case reports and literature review. OncoTargets and therapy. 2016 Oct; 6171-6176.