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## Two Cases of Iatrogenic Pneumothorax after Intra-Muscular Stimulation (IMS) Therapy

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Recently, intra-Muscular Stimulation (IMS) therapy is being increasingly used for musculoskeletal pain. This procedure is generally regarded as a safe procedure for the general public. Some cases of iatrogenic pneumothorax caused by acupuncture have been reported in the medical literature. However, a case of an IMS therapy associated pneumothorax has not reported. We experienced two cases of iatrogenic pneumothorax after IMS therapy. A 62 year-old man received IMS therapy on the right shoulder due to posterior neck pain. After IMS therapy, acute dyspnea and chest discomfort developed. The other patient was a 74 year-old woman who also received IMS therapy. This patient experienced a nonproductive cough and acute dyspnea after the treatment. As the popularity of this form of alternative medicine increases, we might expect to see more cases of iatrogenic pneumothorax. Physicians should be aware of the adverse events associated with IMS therapy. (*Tuberc Respir Dis* 2007;63:444-448)

**Key Words:** Iatrogenic pneumothorax, Intra-muscular stimulation (IMS) therapy

### 서 론

(Pneumothorax)

가

2.

1.

가

3.

가

가

가

가

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증례

증례 1

환자: OO, 62  
주소:  
현병력:

3

과거력:

가족력:

사회력 및 직업력:

진찰 소견: 100/60 mmHg, 92 /  
, 21 / , 36.6°C

검사실 소견:

pH 7.479, PaCO<sub>2</sub> 32 mmHg, PaO<sub>2</sub> 64 mmHg, HCO<sub>3</sub><sup>-</sup> 17 mmol/L, O<sub>2</sub> saturation 88%

방사선 소견:

, 17%

(Figure 1).

치료 및 경과:

가 100%  
(14F catheter)

. 4

2~ 가  
12 가

(Figure 2).

증례 2

환자: OO, 74

주소:

현병력: 1

(Rt. Shoulder pain)

3

과거력:

가족력:

사회력 및 직업력:

진찰 소견: 140/90 mmHg, 75 /

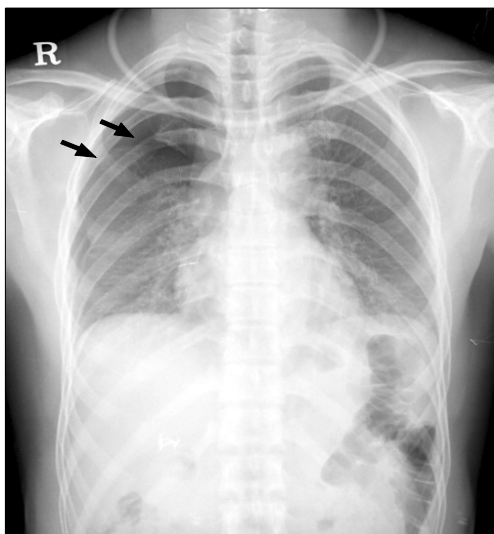


Figure 1. This chest radiograph shows iatrogenic pneumothorax in right-side lung after IMS therapy.

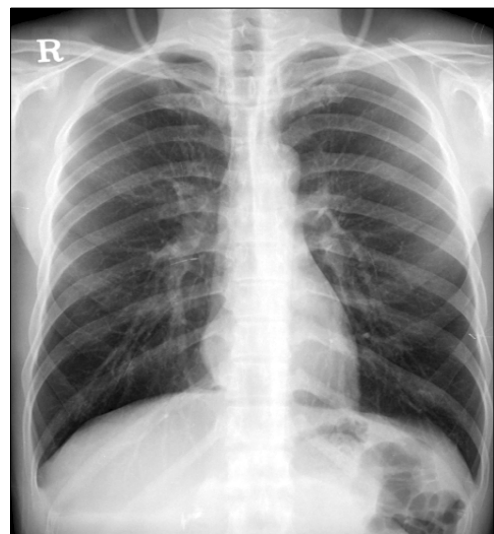


Figure 2. Chest PA view after mini-tube aspiration shows expanded lung.

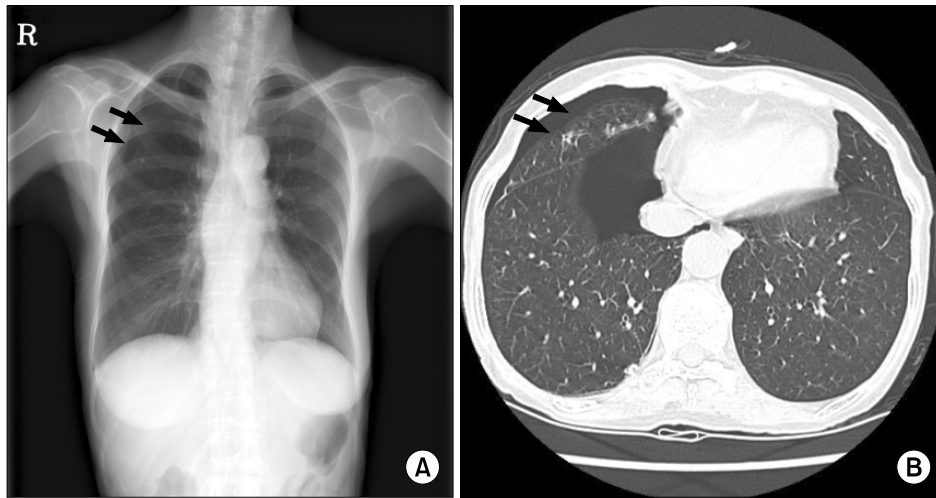


Figure 3. Chest PA view (A) & chest CT (B) shows right-side pneumothorax.

19 / , 36.8°C .

검사실 소견:  
 pH 7.354, PaCO<sub>2</sub> 38 mmHg, PaO<sub>2</sub> 78 mmHg,  
 HCO<sub>3</sub><sup>-</sup> 19 mmol/L, O<sub>2</sub> saturation 86% .

방사선 소견:  
 11% (Figure 3).  
 치료 및 경과:  
 100% . 2  
 , 6  
 가 .

고 찰  
 가 .

spontaneous pneumothorax)  
 (traumatic pneumothorax) 1.  
 1 10 7.4 ,  
 1.2  
 . 25% 가 .  
 (iatrogenic pneumothorax)

(transbronchial lung biopsy, TBLB),  
 (percutaneous needle aspiration or lung biopsy),  
 (subclavian vein catheter can-  
 ulation), (thoracentesis), (pleural bi-  
 opsy), (positive pressure ventilation)  
 가  
 가  
 가 ,  
 가  
 가  
 1983 (Chan Gunn)  
 ,  
 6-8 .

가 90% , 가 , Chernick Avery<sup>12</sup> 가 6  
 64% , 가 40% , 가  
 . 가 (needle aspira-  
 . , tion) , (intercostal  
 9,10 . 24 . space) , 가 16 guage  
 , three way stopcock  
 , 가 4  
 , 가 (conventio-  
 . 가 (tactile fremitus) . 가 (hyper-  
 resonance of percussion test) , nal method) 가  
 . Roggla<sup>13</sup> Pancione<sup>14</sup>  
 (lateral decubitus) . 1. , 가 가  
 , 가 가  
 가 가  
 가 % , 가  
 . , 가  
 1. , 가  
 (percentage of pneumothorax) 100-(Lung<sup>3</sup>/Hemithorax<sup>3</sup>)×100 ,  
 17% , 11% , 가  
 , 가 가 가  
 가 가 가 가  
 . 가 40% , 가  
 . Kircher Swartzel<sup>11</sup> 24 ,  
 1.25% 가

## 요 약

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