

Unilateral Pneumothorax Secondary to Acupuncture in an Asthmatic Patient: One Complaint, Two Suspect

Astımlı Bir Hastada Akupunktura İkincil Tek Taraflı Pnömotoraks: Bir Şikayet, İki Şüpheli

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ABSTRACT

Acupuncture is one of the most popular type of alternative complimentary medicine that has been practice all over the world nowadays. It is an invasive procedure where small needle being used at certain point on the body. The Chinese style of acupuncture tends to insert it deep within the muscle, while the Japanese style entails insertion into the subcutaneous tissue Hence it carries with it certain risks of adverse events which majority is minor complication. However few cases of bilateral pneumothorax including bilateral tension pneumothorax have been reported before. We report an interesting case of a 57-year-old lady with long standing asthma, which presented similar as asthmatic attack but later found out she developed pneumothorax following acupuncture therapy. Acupuncture is still can be consider as an efficient and relatively safe with minimal complication. We suggest patient with long standing asthma or chronic lung disease to have a base line chest x-ray in a patient before proceeding with acupuncture on the chest area, meanwhile as family physician and emergency physician doctor need to have high index of suspicion if patient has sign and symptoms of pneumothorax which can be fatal if missed diagnosed as asthmatic attack.

Keyword: Acupuncture, complication, pneumothorax

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ÖZET

Akupunktur, günümüzde tüm dünyada uygulanan en popüler alternatif tamamlayıcı tıp türlerinden biridir. Vücudun belirli bir noktasında küçük iğnelerin kullanıldığı invaziv bir işlemdir. Çin tarzı akupunktur, kasın derinliklerine yerleştirme eğilimindeyken, Japon tarzı deri altı dokuya yerleştirmeyi gerektirdiğinden, çoğu küçük komplikasyon olan bazı yan etkilerin risklerini beraberinde getirir. Ancak daha önce bilateral tansiyon pnömotoraks dahil birkaç bilateral pnömotoraks vakası bildirilmiştir. Uzun süredir devam eden astımı olan, astım atağı ile benzer olan ancak daha sonra akupunktur tedavisini takiben pnömotoraks geliştirdiğini ortaya çıkaran ilginç bir 57 yaşında bir bayan olgusunu sunuyoruz. Akupunktur hala minimum komplikasyonla verimli ve nispeten güvenli olarak düşünülebilir. Uzun süredir devam eden astımı veya kronik akciğer hastalığı olan hastaya, göğüs bölgesinde akupunktura başlamadan önce bir hastada temel bir göğüs röntgeni çekirtmesini öneriyoruz; bu arada, eğer hasta varsa, aile hekimi ve acil doktor doktorunun yüksek şüphe indeksine sahip olması gerekir. Gözden kaçtığına ölümcül olabilen pnömotoraksın belirti ve semptomları astım atağı olarak teşhis edilir.

Anahtar Sözcükler: Akupunktur, komplikasyon, pnömotoraks

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INTRODUCTION

Acupuncture is a technique that has been used by ancient medical practitioners since more than 3000 years ago. This ancient Chinese medical practice has been increasingly popular across the world including Malaysia. Even in developed countries like America, it has been estimated around 10 million acupuncture procedures performed each year.⁽¹⁾ Recently acupuncture is being used as an analgesic for thyroid and brain surgery. We report a case of pneumothorax developed after acupuncture which mimics an asthmatic attack.

A 57-year-old lady with background Bronchial Asthma, Dyslipidaemia, and Hypertension presented to ED with complaint of shortness of breath which was gradually worsening over one day. Her last Bronchial Asthma attack was almost 4 months prior and she was on MDI Salbutamol on PRN basis. Prior to the symptoms, patient went for acupuncture therapy for her chronic joint pain. Patient claims two needles were inserted perpendicularly at her back. One day after the procedure, patient started feeling difficulty in breathing and she was rushed to ED. Otherwise, she denied TB contact, and there were no chronic cough, no loss of appetite and no loss of weight.

At ED, she was tachypneic with respiratory rate of 32 breaths per minute. She is able to saturate well under room air with SpO₂ of 100% on nasal prong. Other vital signs were stable. Trachea was not deviated, and apex beat is not displaced. No subcutaneous emphysema at the chest. Lung auscultation revealed reduced air entry on left lung, with hyper-resonance upon percussion. Chest x-ray showed pneumothorax at left lung field (Figure 1). Chest tube was inserted and patient symptoms improved.

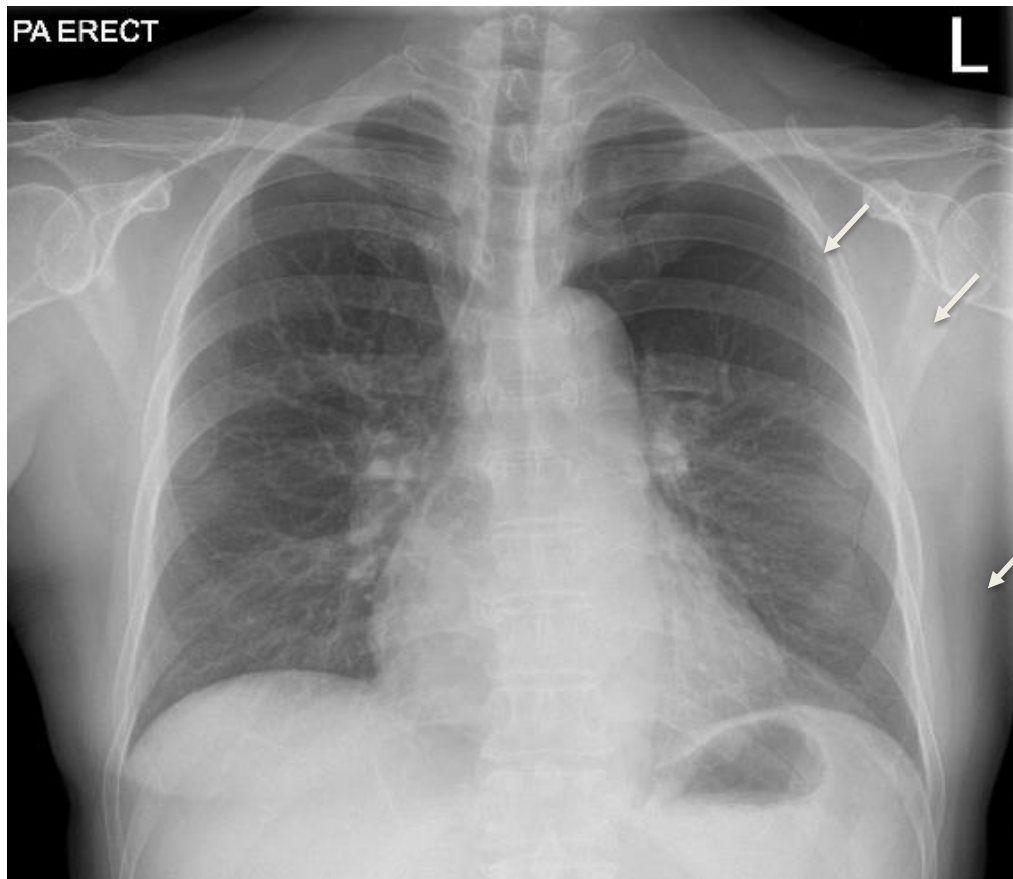


Figure 1: Chest x ray showed pneumothorax at left lung (white arrow showed lung border)

DISCUSSION and CONCLUSION

It has been proven that acupuncture has clinical efficacy in relieving pain, headache and even enhance the recovery in post stroke patient. It is believed that acupuncture helps to relieve the pain by enhancing the release of endogenous ant nociceptive system to modulate pain transmission and pain response, at different levels of the central nervous system.⁽²⁾ In 70% of these cases, there was a subsequent improvement in the presenting complaint⁽³⁾.

However, besides all the benefit, it also carries a small percentage of complication which is majority is a minor complication. It was reported incidence of minor complication is 671 per 10 000 and the most common events were bleeding 310 per 10000 and needling pain 110 per 10000. Aggravation of symptoms occurred in 96 per 10 000 consultations.⁽³⁾ The presentation of the adverse event can either be early or late. A reported case, patient presented with hemothorax two weeks after acupuncture procedure which probably due to non-stop bleeding from a small bleeding point.⁽³⁾ Common fatal adverse events are like pneumothorax, cardiac tamponade or hemothorax.^(4,5)

In our case, patient was lucky because she sought medical treatment immediately after she developed the symptoms as advised by the acupuncturist.

We wonder why she developed unilateral pneumothorax. One of the hypotheses is rupture of bullae due to long-standing asthma. However, we could not prove this as we did not have any baseline chest x-ray to compare with.

In conclusion, acupuncture is still considered as an efficient and relatively safe with minimal complication. We suggest patients with long-standing asthma or chronic lung disease to have a baseline chest x-ray in a patient before proceeding with acupuncture on the chest area, meanwhile as family physician and emergency physician doctors need to have a high index of suspicion if patient has signs and symptoms of pneumothorax which can be fatal if missed or diagnosed as an asthmatic attack.

Conflict of interest

No conflict of interest was declared by the authors.

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