centrales o sintomáticos, se recomienda anticoagulación con heparina en fase inicial y paso posterior a dicumarínicos durante 3-6 meses. Tras ese periodo se produce la endotelización del cuerpo extraño.

Los pacientes con contraindicación para la anticoagulación y émbolos lineales y pequeños podrían ser candidatos a la retirada endovascular del material por vía percutánea[7]. La trombectomía quirúrgica se reserva para pacientes seleccionados, con fallo cardiaco y embolia central de gran tamaño[8].

En conclusión, el EPC es una complicación relativamente frecuente tras vertebroplastia y cifoplastia. Por tanto, es fundamental sospecharlo en pacientes con sintomatología, aun inespecífica, y procedimiento de cementación reciente. Se considera adecuado la realización de una radiografía de tórax para la detección de material de cimentación fugando a través del sistema vascular. La anticoagulación durante 3-6 meses es un tratamiento aceptado en pacientes sintomáticos y embolia central.

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https://doi.org/10.1016/j.opresp.2020.01.002
2659-6636/

Iatrogenic Bilateral Pneumothorax Due to Acupuncture

Neumotórax bilateral iatrogénico por acupuntura

Acupuncture is a therapeutic modality developed in China involving the insertion of fine needles in specific body points. Currently, acupuncture is practiced in western countries by an increasing number of healthcare practitioners, mainly for the purpose to relive chronic pain.[1]

Although traditionally considered a safe procedure, the exact incidence of adverse events of acupuncture is not known and underreporting is suspected. Most described adverse effects refer to minor complications, like local pain or minor bleeding. However more serious adverse events, like pneumothoraces, are also reported in literature.[2,3]

We report a 24-year-old female presented to our emergency department with posterior thoracic pain. The patient had smoking habits and previous history of asthma diagnosed since childhood controlled with low dose inhaled corticosteroids and long-acting β agonist. She was also under omeprazole due to gastritis.

The patient had resorted to a physiotherapist complaining of pain in the left shoulder. The physiotherapist performed acupuncture and inserted needles bilaterally on the posterior suprascapular region. Fifteen minutes after this procedure, she developed pain in the posterior thorax that aggravated with inspiration. In the day after she went to a general practice consultation and was medicated with ibuprofen. As the pain persisted, the patient sought our emergency department.

Upon admission, the patient was alert and calm, had a blood pressure of 117/72 mmHg, heart rate of 67 beats per minute, respiratory rate of 18 breaths per minute, an oxygen saturation of 98% without oxygen supplementation and was apyretic. Inspection of her back showed no evidence of ecchymosis or needle marks. Pulmonary auscultation with breath sounds slightly decreased on the upper lung fields. Her blood analyses were normal, and a chest X-ray revealed the presence of pneumothorax on both pulmonary apices (distance from the lung apex to the cupola < 2.5 cm) (Fig. 1).

She was admitted at the Pulmonology department and treated in a conservative strategy whit oxygen supplementation and absolute bed rest for quicker pneumothorax absorption. For four days the pneumothoraces slowly vanish, while the patient remained clinical stable, being discharged at day 5 and returned to her normal life.

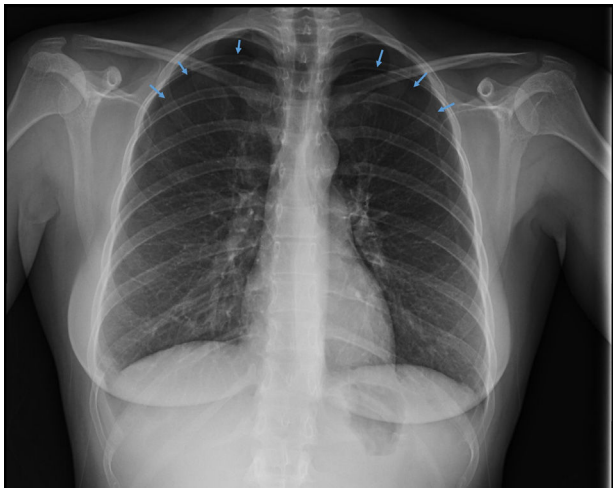

Fig. 1. X-ray.

Although rare, systematic reviews exposed pneumothorax as a severe adverse event of acupuncture that led to death in some cases.[4,5] The true incidence of this event is although difficult to establish. A prospective study conducted by Witt and colleagues included 2.2 million acupuncture sessions in 229,230 patients. Only two cases of pneumothorax were reported suggesting that pneumothorax caused by acupuncture is rare.[6]

Some authors have reported that previous history of lung disease, including chronic bronchitis, emphysema, tuberculosis, lung cancer, pneumonia or previous thoracic surgery, increase significantly the risk of pneumothorax after acupuncture.[7] The needle insertion depth is a critical determinant that can be affected by individual characteristics like sex, height, weight and body mass index. Because of that, some authors suggest the use of ultrasonography in order to prevent acupuncture-related pneumothorax.[8]

All acupuncture practitioners must be aware of pneumothorax risk so they could refer immediately the patient to a specialist when suspicion exists.

Therefore, fully informed consent should be given to all patients prior to any procedure so that these patients are advised of possible adverse events and alert to identify pneumothorax symptoms in order to seek prompt medical care. As for emergency doctors, they should raise the suspicion for traumatic pneumothorax in patients with dyspnea or thoracic pain after acupuncture sessions on the chest.

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https://doi.org/10.1016/j.opresp.2020.02.004
2659-6636/