Incidental findings of Susuk in Orthopaedic patients

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ABSTRACT
The insertion of ‘susuk’ or charm needles is a practice common in Southeast Asia. It is a form of metallic talisman inserted subcutaneously in different parts of the body. This case report describes three patients (an 85-year-old Chinese man, a 53-year-old Malaysian woman and a 74-year-old Chinese woman) who were evaluated for knee and low back pain and were incidentally to have charm needles on their radiographs. None of these patients complained of any problem related to these charm needles.

Keywords: Charm needles, susuk, orthopaedic, radiograph

INTRODUCTION
The insertion of ‘susuk’ or charm needles is a practice common in Southeast Asia. It is a form of metallic talisman inserted subcutaneously in different parts of the body. Susuk are most commonly reported in the craniofacial region. These are inserted for a varied number of reasons and their number may also vary. There are certain beliefs or taboos associated with their use. While some reports are in the form of single cases, a few larger series are also available in literature.

CASE REPORTS
Case 1: An 85-year-old Chinese man presented with left knee pain. Clinical examination revealed features of osteoarthritis of the knee. Plain radiograph of the knee (Figures 1a and b) revealed a radio-opaque, needle shaped object in the subcutaneous tissue on the posterior aspect of the knee.

Case 2: A 53-year-old Malaysian Muslim woman was seen for low back pain. She was noted to have mechanical back pain without neurological deficit. Plain radiograph of the lumbo-sacral spine showed a needle like metallic object in the subcutaneous tissue in the left lumbar paravertebral region, against the spinous process of the third lumbar vertebra (Figures 1 c and d).

Case 3: A 74-year-old Chinese woman patient reported with left knee pain of insidious
onset. Clinical diagnosis of osteoarthritis of the knee was made and a plain radiograph revealed a needle shaped object in the subcutaneous tissue on the posterior aspect of the knee (Figures 1 e and f).

Though not related to the patient’s symptoms, the presence of radio-opaque shadows led to initial confusion as to the origin of these as I had not seen this radiological finding in my practice before. All the three patients admitted to insertion of susuk needle between 30 to 40 years previously with the intention of relief of pain. To avoid problems related to the knee and low back region in future.

DISCUSSION
Most reports of susuk are from Southeast Asia where this practice is common. Though this

Figs 1: Plain radiographs showing charm needles: a (anterior posterior view) and b (lateral view) showing a charm needle in the posterior aspect of the knee in patient 1; c and d) showing a charm needle at L3 level in patient 2; and e and f) showing a charm needle on the posterior aspect of the knee in patient 3.
practice is more common in Malay Muslim women, it is also been reported among Chinese and Indian women. ¹⁰

Susuk are worn as talismans with the belief that these will improve the health and beauty of the wearer, improve career and business, cure ailments and protect the wearer from harm or improve relationship by casting a spell. ³, ⁸

Gold is the most common metal used in susuk followed by silver and copper. In one analysis susuk were seen to be composed of gold and copper. ¹¹ In a chemical analysis conducted by Balasundaram et al. and quoted by Nambiar et al. ¹⁰, susuk contained less than 90% gold and other metals detected were aluminium, iron, copper and silicon. Gold is presumably used for its biocompatibility and noncorrosive properties while copper is used to increase its malleability and hardness. With the widespread use of magnetic resonance imaging where presence of metallic foreign body is contraindicated, Namibia et al. ¹⁰ investigated the ferromagnetic properties of a susuk. The authors did not notice any artifact caused by susuk suspended in jelly suggesting that susuk has no ferromagnetic properties.

The most common site for insertion of susuk is the face though they have also been reported in the chest, abdomen, breasts, spine, mons pubis and limbs. ², ⁴, ⁷-¹⁰ In the cranio-facial region, the most common sites for insertion are over the mandible followed by forehead, cheeks and lips. ⁸ The needles are between 0.5 to 1 mm in diameter and 5 to 10 mm long and are inserted subcutaneously by ‘bomoh’ by gentle rubbing on the skin such that it is painless and leaves no puncture marks or blood. ⁸ The needles are painless, not visible to the naked eye and not easily felt on palpation. ¹² The number of needles inserted varies. In a study of 33 susuk wearers, Nambiar et al. ¹⁰ noted between 1 to 39 needles in the cranio-facial region while Oon ¹ had earlier reported between 1 to 47 susuk in a single patient. Nor et al. ⁹ reported 80 susuk noted in the face of a patient.

For religious reasons and to ensure the potency of susuk, their presence is usually kept a secret by the wearer. In some cases the wearer is unaware of their existence as these could have been inserted at a young age when a bomoh was approached for treatment of some illness. ⁸

Susuk wearers are supposed to follow certain taboos. Some fruits like banana and pumpkin are forbidden. It is also believed that the susuk needle may come out if the wearer passes under a clothes line or stairs. ⁸ Some believe that if the needles are removed before death, the susuk wearer will be subjected to long and terrible agony while others believe that their presence at the time of death may lead to a painful death. ¹¹, ¹³

In clinical practice, Susuk may be confused with foreign bodies that are responsible for patients’ symptoms based on the site of their insertion particularly in the orofacial region. Furthermore, the presence of susuk may interfere with the quality of dental radiograph. Their presence may mimic root fillings or restorative pins. ⁸ Dias and Jiffry reported presence of susuk as the cause of pain during the procedure of impression taking and mucosal impingement by long dental flanges. ¹⁴ To
date, no complications have been reported in the literature. However, potential damage to vital organs or penetration of neurovascular structures cannot be ignored.

In conclusion, clinicians practicing particularly in south-east Asia should be aware of the practice of susuk insertion and their incidental detection on radiographs. Susuk rarely cause any symptoms and are unlikely to lead to any complication. While these were the only cases seen by myself over five years in a private clinic, they may be more commonly detected in general hospital where patients who have had susuk insertion are more likely to seek consultation and treatment.

REFERENCES
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