

# 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,<sup>1-4</sup> a few larger series are also available in literature.<sup>5-10</sup>

## CASE REPORTS

**Case 1:** An 85-year-old Chinese man present

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

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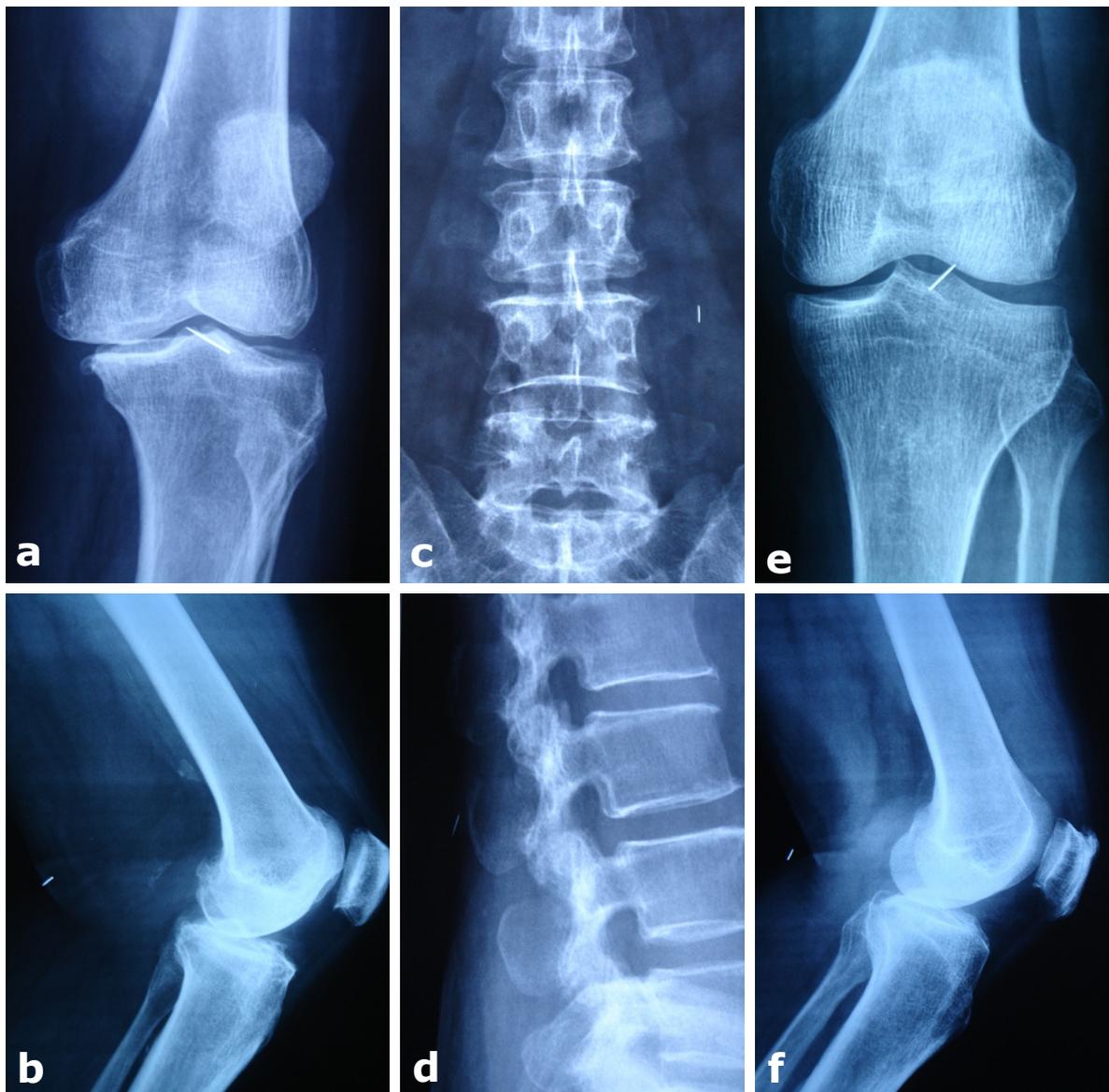
onset. Clinical diagnosis of osteoarthritis of the knee was made and a plain radiograph revealed a needle shaped object in the subcutaneous tissue on the posterior aspect of the knee (Figures 1 e and f).

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.<sup>10</sup>

*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.<sup>3,8</sup>

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.<sup>11</sup> In a chemical analysis conducted by Balasundaram *et al.* and quoted by Nambiar *et al.*<sup>10</sup>, *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, Nambiar *et al.*<sup>10</sup> 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.<sup>2, 4, 7-10</sup> In the cranio-facial region, the most common sites for insertion are over the mandible followed by forehead, cheeks and lips.<sup>8</sup> 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.<sup>8</sup> The needles are painless, not visible to the naked eye and not easily felt on palpation.<sup>12</sup> The number of needles inserted varies. In a study of 33 *susuk* wearers, Nambiar *et al.*<sup>10</sup> noted between 1 to 39 needles in the cranio-facial region while Oon<sup>1</sup> had earlier reported between 1 to 47 *susuk* in a single patient. Nor *et al.*<sup>9</sup> 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.<sup>8</sup>

*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.<sup>8</sup> 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.<sup>11, 13</sup>

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.<sup>8</sup> 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.<sup>14</sup> 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.

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