(Fig 1). This resembles the armour worn by the Roman gladiators, hence the name.

DISCUSSION

This simple modification prevents the toddler from removing their hand dressing and offers some protection from food and dirt. The protector is easy to make, can be washed and is made from a cheap, readily available garment. The advantage over a simple sock is that this modification is far more robust and is very difficult for the child to remove.

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Intraoperative arthrograms facilitating metalwork placement in osteopenic patients

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doi 10.1308/rcsann.2018.0057

BACKGROUND

Osteopenia can occur in a variety of medical conditions including diabetes, renal failure and as a result of some drugs. It can also be the result of reduced bone loading in prolonged periods of limb disuse.¹ Low bone mineral density poses intraoperative challenges during ankle arthrodesis; bony landmarks can be difficult or impossible to see on fluoroscopy due to the reduced radiopacity of osteopenic bone, making component placement challenging.

TECHNIQUE

Intraoperative arthrography can be helpful in identifying anatomical landmarks during arthroscopic ankle fusion. In cases where bone margins are impossible to delineate with certainty (Fig 1a), we suggest the following arthrography technique: 3 ml Omnipaque 300 contrast fluid (GE Healthcare) is infiltrated via a fine-bore needle introduced under fluoroscopic guidance into the joint space of the ankle joint, improving bony visualisation on fluoroscopy and thus aiding the safe and correct siting of the fusion screws (Fig 1b).

Figure 1 Fluoroscopic images of the ankle joint before (a) and after (b) contrast enhancement, with the underlying bony anatomy made more visible, aiding arthrodesis

DISCUSSION

Other techniques, such as three-dimensional computed tomography, can be used in cases of low bone mineral density, but it is expensive and rarely available. Increasing radiation doses in fluoroscopy will enhance visualisation but may lead to increased risks to theatre staff.² Intraoperative arthrography is a cheap, safe and easily accessible adjunct for osteopenic patients. A similar technique has also been used successfully by the authors for an ambiguous neck of femur fracture.³

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