

close fitting (approximately 10 × 20 cm) non-adhesive Allevyn dressing which is 6 mm thick, attached by surgical tape (Fig. 1). Allevyn, (Smith and Nephew Healthcare) is composed of two distinct layers⁸ representing the epidermis and dermis, allowing cutaneous and intradermal stitches to be inserted (Fig. 2). It is therefore unlike other models such as latex, which are thinner and less rigid.

We have found this to offer a cheap effective suturing model that is portable and allows different types of sutures to be practiced. It may be beneficial as an educational and confidence-building tool. Progress can be assessed using adaptations of the OSATS marking criteria,⁵ in conjunction with the Imperial College Surgical Assessment Device (ICSAD) for motion analysis as an objective measurement of surgical dexterity.¹

In conclusion, we describe a new synthetic model that eliminates the practical and ethical problems associated with the use of patients and animal models, and is superior to other synthetic models because of its thickness and rigidity.

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The correction of secondary cleft lip deformities using dermafats grafts

Sir, I read with interest the paper by I. Patel and P.N. Hall on the subject of using dermafats grafts to correct a whistle deformity in patients with cleft lip (*Br J Plast Surg* 2004;57:160–164).

I am writing because the authors state on page 161 that 'there are no reports of use of autologous dermis to correct secondary cleft deformity in the current literature'.

In 1997, I wrote a very similar paper with Adrian Richards—'The correction of secondary cleft lip deformities using dermafats grafts' and published this in the *European Journal of Plastic Surgery* (1997;20(1):44–47).

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A simple technique for securing the amputated part during preparation in fingertip replantation

The most frequent level of digital amputation is through the distal phalanx. This level is one of the best indications for microsurgery.

The first surgical step involves preparation of the distal amputated part.

This is usually done under high magnification. In Tamai zone 1 level amputation, palmar veins need to be identified after raising thin dermal flaps. The distal part is very small to be held between the thumb and index finger of the assistant. The identification of the small sized vessels can be frustrating if the part keeps moving during dissection. To overcome this problem, we use the polypropylene suture pack (Ethicon Ltd), which has multiple holes in it. We place a 4-0 suture through the nail plate and fix the part to the flat side of the pack. Once fixed, the assistant needs only to hold the pack. As the suture passes through two holes it is very stable and prevents any movement of the fingertip (Fig. 1).

The distal part is kept on the assembly even after identification and tagging of the vessels. As the pack is white in colour it serves as a good background to see the tagged structures under microscope. The distal part is removed just before osteosynthesis. This way unwanted handling of the

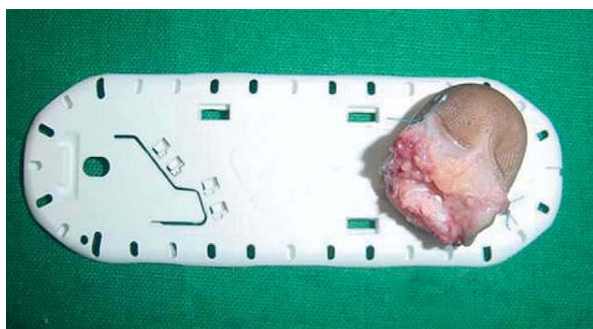


Fig. 1 Preparation of the distal part.

fine structures is also avoided. We find this simple idea makes finger tip replantation easier.

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Vascular steal syndrome occurring 20 years after surgical arteriovenous fistula formation: an unusual cause of loss of hand function

A 41-year-old right-handed engineer developed end stage renal failure of unknown aetiology in 1980. A left radiocephalic end-to-side arteriovenous fistula was formed and he commenced haemodialysis without complication. Within 6 months he received a renal transplant from a live, related donor, which has functioned well ever since. Over the next 20 years the patient experienced no problems with his fistula and therefore it was left intact.

In October 2000 he suffered a crush injury to his left hand at work, which caused a severe contusion and laceration to the dorsum of the hand without any associated fractures. The wound was left open to heal by secondary intention. Skin coverage was delayed for several weeks and when complete was marked by persistent loss of hair and eczematous like desquamation over the wound (Fig. 1). The whole hand became painful, and in addition developed paraesthesia for light touch, which impaired fine movements. These symptoms were further exacerbated by cold and exercise. The discomfort and altered sensation affected his dexterity and confidence such that he had to give up his normal activities at work and consequently he became psychologically depressed. He was reviewed by hand specialists, physiotherapists and occupational therapists who administered various



Figure 1

courses of physical therapy but without significant improvement. In 2003, (having been made redundant) he was seen by one of the Transplant surgeons in the outpatient department who diagnosed a steal syndrome in the left hand by demonstrating exacerbation of the symptoms with a 'ball-squeezing' exercise which abated when the fistula was compressed. We therefore decided that the treatment would be to surgically close the fistula.

We hypothesize that due to the longstanding fistula the left hand had already developed a 'sub-clinical steal syndrome'. After the trauma the altered haemodynamics and increased oxygen demand created by the healing wound exposed the critical nature of the hand perfusion. As a result there was delayed wound healing and the patient suffered ischaemic symptoms distal to the fistula. The fistula was closed in November 2003 under regional anaesthesia with reconstitution of the radial artery.¹ The neurological symptoms resolved completely within hours of the procedure and the skin over the wound has reverted to normal (Fig. 2).

Ischaemic complications after upper limb arteriovenous fistulae are well documented,² arising most commonly in elderly diabetic females with a brachial artery anastomosis.³ Ischaemic monomelic



Figure 2