



## Lipoma extraction via small remote incisions

J. A. Pereira and F. Schonauer

*Department of Plastic Surgery, The Queen Victoria Hospital, East Grinstead, UK*

**SUMMARY.** We describe a technique for extraction of lipomata using gynaecological polyp forceps, via incisions placed in aesthetically better sites than directly over the lesion. Although this can also be achieved by liposuction, we have found that this alternative technique is valuable in those cases where liposuction has failed due to the fibrous nature of the lesion, or where equipment is not available. © 2001 The British Association of Plastic Surgeons

**Keywords:** minimal incision, scar, lipoma.

As public demand for smaller and more cosmetically acceptable scars increases, we are constantly searching for new techniques to remove subcutaneous lesions using small incisions hidden from view. One example of this is removal of lipomata with liposuction. Those who regularly try this, however, will be aware that the results may occasionally be disappointing, especially if the lipoma is very fibrous. If liposuction fails or the equipment is unavailable, removal may require a larger scar, and this must be discussed with the patient before surgery. In cases such as these we have found that removal of the lipoma through a small incision is still possible, using gynaecological polyp forceps passed down a subcutaneous tunnel from an incision placed in an aesthetically advantageous site.

We present a consecutive series of our first five cases, who have now been followed up for between 6 months and 1 year, describe the technique and discuss its relative advantages.

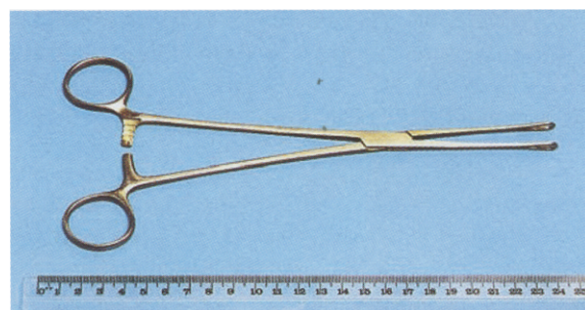
### Patients and methods

Five patients with subcutaneous lipomata were treated by forceps extraction over a 12 month period and reviewed after a minimum of 6 months. There were four females and one male; the mean age was 37 years. The indication for using this technique was intraoperative failure of liposuction in two cases and the unavailability of liposuction equipment in three cases. Three patients were operated on under general anaesthesia and two under local anaesthesia.

We illustrate this technique with a case of a lipoma over the anterior deltoid region (Fig. 1). The patient was unhappy with an open approach as she had scarred badly after a vaccination on the contralateral shoulder. Liposuction extraction was therefore planned via an axillary incision. At operation, however, the lipoma proved too fibrous to remove with conventional liposuction (wet technique using saline/bupivacaine/adrenaline and hyaluronidase mixture, Lipotron suction and Mercedes 4 mm cannula). A 2.5 ml syringe with the plunger removed and tip cut off



**Figure 1**—Preoperative view of a lipoma over the deltoid area.



**Figure 2**—The gynaecological polyp removing forceps.

was introduced into the axillary incision and passed subcutaneously towards the lipoma. This plastic 'port' prevents trauma to the skin edge and holds the tunnel open for passage of the polyp forceps (Fig. 2), which fits



**Figure 3**—Postoperative view showing good contour and a hidden scar.



**Figure 4**—The scar in the axilla has almost disappeared at 6 months.

**Table 1** Details of patients

Case number	Sex	Site	Size (cm)	Scar site	Scar length (cm)	Reason for choosing this technique
1	F	deltoid area	8 × 4	axilla	1	lesion too fibrous at liposuction
2	F	iliac crest	5 × 3	appendectomy scar	1	no liposuction available
3	F	upper back	8 × 6	excision site of naevus	2	no liposuction available
4	F	proximal forearm	4 × 3	antecubital fossa skin crease	1.5	lesion too fibrous at liposuction
5	M	anterior chest	4 × 4	periareolar	1	no liposuction available

neatly through. The lipoma was then easily removed piecemeal using the spatulated grasping ends of the forceps. A foam-tape dressing was applied for 48 h to prevent excessive bruising or haematoma formation. The result at 6 months was excellent (Fig. 3); the axillary scar was all but invisible (Fig. 4).

## Results

All lesions were successfully removed via remote, aesthetically acceptable incisions, or by using other pre-existing scars (e.g. appendectomy scar) or incisions made to excise other skin lesions (e.g. hairy naevus). No incisions directly over the lipomata were required. There were no immediate or late complications, and all our patients were very satisfied with the results of their surgery at follow-up 6 months to 1 year postoperatively. Specifically, the sites of all lipomata remained smooth in contour and no firmness was detectable along the track of the subcutaneous tunnel from the incision to the lesion.

Table 1 summarises the patients, lesion sizes and placement of incisions.

## Discussion

Conventional techniques for removal of lipomata include large open incisions, the 'squeeze technique' whereby fat

is expressed through a small incision over the lesion<sup>1,2</sup> and liposuction.<sup>3</sup> Liposuction allows extraction of the lipoma through a remotely placed incision, which may lead to a more aesthetically acceptable outcome in the long term. More recently, use of an endoscope to assist with extraction of lipomata has been described<sup>4</sup> but this requires specialist equipment and is overcomplicated for the majority of cases. Our technique of forceps extraction shares the advantage of a remote scar and is also applicable to very fibrous lipomata that are not amenable to liposuction or to the squeeze technique. The equipment is cheap and readily available, even in the outpatient local-anaesthetic setting where liposuction equipment and endoscopy are generally unavailable.

The gynaecological polyp forceps is long and has a narrow grasping end designed to fit through the cervix; it is therefore the ideal instrument to pass through a small remote incision. The blunt end is used to 'shell out' the lipoma whilst simultaneously manipulating the lesion with the non-dominant hand; the lipoma is then removed either whole or piecemeal depending upon its size and consistency. We have subsequently found that the standard sponge holding forceps can also be used effectively but requires a larger incision, often placed closer to the lesion. This technique has now become our technique of choice for the majority of lipomata where incisions can be hidden from view. Careful planning, adequate local anaesthetic infiltration and blunt dissection from the incision

site to the lipoma have thus far avoided complications such as haematoma formation and paraesthesia due to cutaneous nerve damage.

Patient satisfaction is very high, especially where they are expecting an open approach with an incision over the lipoma. When there is concern about the lack of histological material available following liposuction,<sup>5</sup> this technique has the added advantage of producing larger specimens of architecturally preserved fat globules for analysis.

Although we have had no complications to date (cases now number 16) we advise that the technique should not be used if the lipoma is deeply situated or if there is any risk to neurovascular structures in the area.

### Acknowledgements

We would like to thank Mr J. G. Boorman, Mr K. W. Cullen and Mr R. W. Smith, Consultant Surgeons at the Queen Victoria Hospital, East Grinstead, for allowing us to report upon their patients. We also thank the Departments of Medical Illustration at The Queen Victoria Hospital and The Kent and Canterbury Hospital for the photographs.

### References

1. Powell B, McLean NR. The treatment of lipomas by the "squeeze" technique. *J R Coll Surg Edinb* 1985; 30: 391–2.
2. Kenawi MM. 'Squeeze delivery' excision of subcutaneous lipoma related to anatomic site. *Br J Surg* 1995; 82: 1649–50.
3. Hallock GG. Suction extraction of lipomas. *Ann Plast Surg* 1987; 18: 517–19.
4. Takeuchi M, Nozaki M, Sasaki K. Endoscopic-assisted transaxillary removal of lipomas in the back and shoulder region. *Ann Plast Surg* 1997; 38: 109–14.
5. Schuffenecker J. Faut-il enlever les lipomes par lipoaspiration? A propos d'un liposarcome myxoïde grade I sous-cutané de l'épaule. *Ann Chir Plast Esthét* 1996; 41: 98–102.

### The Authors

**J. A. Pereira FRCS**, Specialist Registrar

**F. Schonauer**, Specialist in Plastic Surgery

Department of Plastic Surgery, The Queen Victoria Hospital, Holtye Road, East Grinstead RH19 3DZ, UK.

Correspondence to Mr John Pereira, Department of Plastic Surgery, St. Thomas' Hospital, Lambeth Palace Road, London SE1 7EH, UK.

Paper received 17 April 2000.

Accepted 19 September 2000.