

## CORRESPONDENCE AND COMMUNICATION

## A simple approach to facilitate the use of microdebrider for treatment of fibrous gynaecomastia



Dear Sir,

The microdebrider is well known amongst the ENT surgeons for their functional endoscopic sinus surgery.<sup>1</sup> This is a

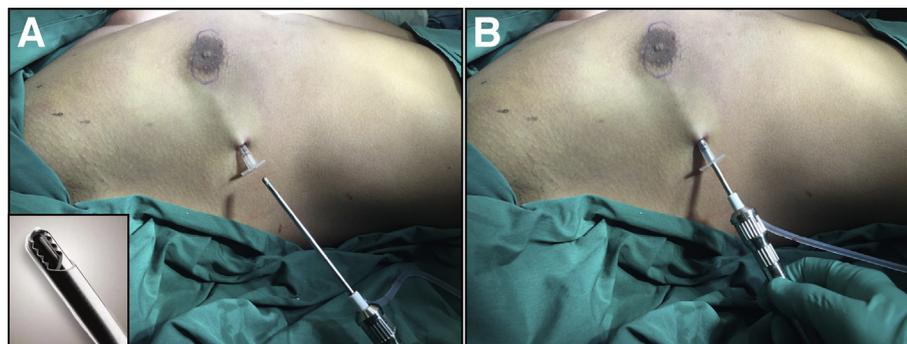


**Figure 1** 1 cc Syringe fashioned by cutting the distal tip with a No.15 blade.

powered rotatory shaving instrument attached to a continuous suction device. We have previously described the use of the microdebrider in patients with fibrous gynaecomastia to avoid the need for a peri-areolar incision for removal of the breast tissue.<sup>2</sup>

The microdebrider is ideal for the treatment of fibrous gynaecomastia as the serrated oscillatory blades enables sharp excision of the fibrous tissue in a controlled fashion. Due to the suction property of the microdebrider, one of the main drawbacks of this instrument is that the oscillating blades can catch the skin edge during cannula withdrawal. This can potentially cause skin lacerations or lacerations to the nipple areola complex. Moreover, repeated passages of both the microdebrider and the suction lipoplasty cannula may also lead to skin friction burns and hypertrophic scarring.

Based on these potential complications, we propose an affordable modification using a 1 cc syringe as a cannula port for both the microdebrider as well as the traditional suction lipoplasty cannula. The tip of the 1 cc syringe (without plunger) is fashioned by making a straight cut at the distal tip using a No.15 blade (Figure 1). After making a 5 mm stab incision over anterior axillary line, blunt soft tissue dissection is then performed using an artery forceps prior to insertion of the refashioned syringe. The microdebrider cannula has a diameter of 4 mm and can be inserted easily through the 4.73 mm diameter syringe barrel (Figure 2). With the syringe as a cannula port, it protects the skin from accidental lacerations, friction burns, and hypertrophic scarring from both the microdebrider and the suction lipoplasty cannulas. It also allows better control during cannula withdrawal as the surgeon holds onto the syringe barrel.



**Figure 2** Insertion of microdebrider cannula into the syringe port.

We found two papers that brilliantly described a similar method for the liposuction cannula by using a truncated 1 cc syringe, leaving 0.5–1 cm of the proximal syringe barrel behind.<sup>3,4</sup> We recommend cutting the syringe at the distal tip instead, leaving behind a longer barrel. This makes it easier to manipulate the cannula and dissect the fibrous tissues in different directions. The longer barrel prevents accidental dislodgement during the repeated passages. We found that excessive stretching of skin during multi-directional dissection can occur if the syringe flange is anchored down to skin. With the extra length on the syringe barrel, the syringe can be withdrawn slightly and held in place by the surgeon during cannula withdrawal to minimize risk of skin and nipple laceration from the suction-recoil.

In conclusion, this modification that we propose is technically simple, practical, and economical. We hope to achieve lower complication rates and better outcomes for patients using this technique.

### Conflict of interest

All named authors here by declare that they have no conflicts of interest to disclose.

### Financial disclosure

N/A.

### Ethical approval

N/A.

### References

1. Boone J, Feldt B, McMains K, Weitzel E. Improved function of prototype 4.3-mm Medtronic Quadcut microdebrider blade over standard 4.0-mm Medtronic Tricut microdebrider blade. *Int Forum Allergy Rhinol* 2011;1(3):198–200.
2. Goh T, Tan B, Song C. Use of the microdebrider for treatment of fibrous gynaecomastia. *J Plast Reconstr Aesthetic Surg* 2010;63(3):506–10.
3. Bank J, Song DH. Inexpensive method of liposuction cannula port-site protection. *Aesthetic Plast Surg* 2013;37(4):843.
4. Khoo LS, Corona GG, Radwanski H, Fernandes VS, Pitanguy IH. Inexpensive method of liposuction cannula port-site protection. *Aesthetic Plast Surg* 2014;38(1):256–7.

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