# An Uncomplicated and Cost-effective Solution to Large Seromas After Liposuction

Sir,

With the advent of energy-based systems and newer technology in liposuction, the results are much more predictable, and complications are less severe. However, the combination of cutting-edge technique—high definition liposculpture "HDL" and technology like VASER (vibration amplification of sound energy at resonance) has brought about its own set of complications, albeit minor which include indurations, cyclic swelling, more painful recovery, pigmentary changes, skin retraction, contour irregularities, nodularities, seromas, and port site skin burns burns.<sup>[1,3,4]</sup>

A seroma is an abnormal collection of fluid in the subcutaneous tissues and can occur following aggressive liposuction. It is an inflammatory exudate and occurs due to trauma, excessive friction, thermal damage, and lymphatics damage during liposuction. The incidence of seromas is higher with ultrasound-based liposuction technology and is reported to be 3.5–30% in the literature.<sup>[1,2,4]</sup>

We describe an easy and cost-effective method to drain postoperative seromas following liposuction—a 40-year-old male presented with seroma collection following VASER liposuction [Figure 1]. The technique involves the following materials: suction drain canister (16G or 14G size), 14–18G cannula needle, blood transfusion intravenous (IV) infusion line, gauze piece, skin marker, micropore tape, betadine or chlorhexidine solution, artery forceps, and scissors [Figure 2B]. The site of maximum fluctuation of seroma is marked in the patient with a skin marker [Figure 1]. Then after prepping the area with chlorhexidine/betadine scrub, a 16G needle is connected to a blood transfusion IV set, and that is then connected

to the end of the vacuum canister suction tube. The suction is then set and clamped. After ensuring that the lines are all connected and clamped, then the needle is inserted at the point of maximum fluctuation marked previously. The suction clamp is released, and the seroma is drained, and the needle is taped in position temporarily [Figure 2A and C]. If there is no more drainage of fluid, the needle is manually replaced or pricked at another site until more fluid is encountered. The same steps are repeated on the opposite flank and other areas if present. This same procedure was repeated twice after a span of 2–3 days in this patient. The patient did not have any further complaints of seroma re-accumulation after 1 month [Figure 3].

Liposuction is generally regarded as a safe procedure provided that certain principles are adhered to: avoid overly aggressive liposuction as it can lead to seromas, not performing too much superficial liposuction, turning off the machine when exiting port sites, crisscrossing areas, constant analysis of the suctioned areas, and proper positioning and padding of the patient.<sup>[2-4]</sup>

The treatment of postoperative seromas after liposuction includes needle percutaneous aspiration, insertion of drains, and compressive garments; for recalcitrant and chronic cases, injection of bleomycin, tetracycline, and triamcinolone has been suggested. Additionally, for chronic seromas, during percutaneous aspiration, an equal amount of air is injected which acts as an irritant causing obliteration of seroma cavity and finally, surgical exploration with curetting of the lining of cavity or excision of pseudocyst may also be performed.<sup>[2,4-6]</sup>

To the best of our knowledge, this is the first report highlighting the use of this novel and uncomplicated



Figure 1: Seroma accumulation (marked with a red skin marker) 1 week after VASER liposuction

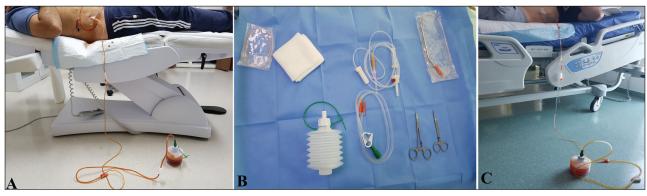


Figure 2: A and C. Drainage of seroma using a simple percutaneous suction drainage system in the clinic. B. Consumables required to set up this percutaneous suction drainage system for seromas



Figure 3: Outcome after 1 month following drainage of seroma

technique in the treatment of seromas associated with liposuction. This technique is simple, can be done in the clinic, uses cheap and readily available consumables, is cost-effective, and finally can also be used to drain multiple and high volume seromas in the immediate postoperative period.

#### **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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#### **Conflicts of interest**

There are no conflicts of interest.

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