

Liposuction Techniques Summary for Manitoba Non-Hospital Medical Surgical Facilities

Manitoba Quality Assurance Program (MANQAP)

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A CPSM registrant must have the required knowledge, skills and judgement to perform the procedures summarized below in a Non-Hospital Medical Surgical Facility.

Liposuction Technique	Infiltrate Solution	Amount of Blood Loss in the Total Lipoaspirate	Comments
1. Dry Technique	 No infiltration solutions used before insertion of the liposuction cannula. 	 Estimated blood loss 20 to 45% of the lipoaspirate 	 Due to the amount of blood loss associated with the dry technique, it must not be done except in limited applications with a volume of 100 ml of total lipoaspirate or less.
2. Wet Technique	Historically this technique involved injecting 200 to 300 ml of infiltration fluid for large anatomic area such as the abdomen or back, but is no longer performed for larger areas.	Estimated blood loss 4 to 30 % of the lipoaspirate.	 The Wet liposuction technique should not be done except in limited applications with a volume of 100 ml of total lipoaspirate or less. This technique was a precursor to the Superwet and Tumescent techniques and is no longer used for higher volume liposuction due to high amounts of blood loss.
3. Superwet Technique	 Utilizes larger volumes of infiltrate solution than the Wet Technique. A ratio of approximately 1ml (approximate range of 0.7 ml to 2ml) of infiltrate solution to 1 ml of planned lipoaspirate to be removed 	Estimated blood loss less than 1% of the lipoaspirate.	 Careful attention must be paid to the total dose of local anesthetic from all sources (injection and infiltrate solution) to prevent local anesthetic system toxicity (LAST) in patients. Careful attention must be paid to all fluids infused (infiltrate or as intravenous fluids administered). All fluids must be accounted for when assessing the total output including the total volume of lipoaspirate, blood loss, and urine output. Vital signs are monitored carefully pre-procedure, during the procedure and during the recovery period. Volume of total lipoaspirate greater than 5000 ml should not be removed during a single procedure. See note #2.

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4. Tumescent Technique	Largest volume of infiltrate solution infusing approximately a ratio of 3 to 4 ml of the infiltrate solution for each planned 1 ml of lipoaspirate.	Estimated blood loss less than 1% of the lipoaspirate.	 The Tumescent technique relies on high-volume hypodermoclysis, the possibility of fluid overload exists. Careful attention must be paid to the total dose of local anesthetic from all sources (injection and infiltrate solution) to prevent local anesthetic system toxicity (LAST) in patients. Careful attention must be paid to all fluids infused (infiltrate or as intravenous fluids administered). All fluids must be accounted for when assessing the total output including the total volume of aspirate, blood loss, and urine output. Vital signs are monitored carefully pre-procedure, during the procedure and during the recovery period. Due to the potential for local anesthetic system toxicity (LAST) and fluid overload, not recommended for total lipoaspirate greater than 3000 ml.

Notes:

- 1. It is important to note the distinction between total fat removed and total lipoaspirate removed. Total lipoaspirate is defined as the combination of total fat and fluid that is removed during liposuction. It is the position of the American Society of Plastic Surgeons that when referring to liposuction volume, total lipoaspirate should be the volume recorded.
- 2. The American Society of Plastic Surgeons defines large volume liposuction as the removal of 5000 ml or greater of total lipoaspirate during a single procedure. Post operative vital signs and urinary output should be monitored overnight in an appropriate facility by qualified and competent staff. There is no overnight stay provided at Manitoba Non- hospital medical surgical facilities (CPSM Accredited Facilities Bylaw and the Manitoba Health Services Insurance Act). Large volume liposuction should not be performed in a Manitoba Non-hospital medical surgical facility.
- 3. A thorough patient assessment and detailed history and examination should occur, including but not limited to, a close focus on cardiovascular and pulmonary status.
- 4. Intravenous Intralipids drugs must be on site at the NHMSF if you are doing liposuction in case of local anesthetic system toxicity occurring.