OFFICE-BASED LIPOSUCTION AND/OR FAT TRANSFER PROCEDURES IN AUSTRALIA

INTRODUCTION
The Royal Australasian College of Surgeons (RACS) and the Australian Society of Plastic Surgeons (ASPS) are all committed to promoting patient safety. This position paper provides guidance specifically for Liposuction and Fat Transfer procedures performed in an unlicensed office-based setting where it is deemed unnecessary for a dedicated sedationist/anaesthetist to be in attendance. It is intended to sit alongside the Recommendations within the “Day Surgery in Australia Position Paper”.

Direction as to the RACS, ASPS, and Australian and New Zealand College of Anaesthetists (ANZCA) position on other office-based procedures are detailed in a separate position paper: “Office-based procedures in Australia”.

The recommendations below need to be considered in the context of local jurisdictional regulations, which vary from region to region.

KEY WORDS
Liposuction, Tumescent solution, Fat transfer, Procedural sedation, Local anaesthetic, Patient care.

DEFINITIONS

1. **Office-based Procedures**: Do not necessarily fall under the criteria for Day Surgery Procedures. Office-based procedures are those performed:
   a. With low doses of local anaesthetic such that any dose given into a single location is insufficient to cause complications or cause systemic toxicity if inadvertently given intravenously, or a dose which is not likely to reach toxic levels by absorption; and,
   b. Without intravenous sedation.

2. **Minor procedure facility**: Some rooms / offices which are, by definition, not at the level of Day Surgery / Day Procedure Facilities, none-the-less provide a safe and satisfactory environment for minor procedures. It is noted that currently there is no single accrediting body that defines a minor procedure facility. It is implied that such a facility has an ability to employ sterile technique and a suitable environment for the storage and administration of local anaesthetics for minor procedures.

3. **Procedural Sedation**: If anxiolysis is required, sedation may be provided that minimally impairs the conscious state. Intravenous sedation should not be used. Practitioners need to
be alert to the potential for the unintentional transition of conscious sedation to deep sedation or even anaesthesia.

   a. Conscious sedation is defined as a drug-induced reduction of consciousness during which patients respond semi-purposefully to verbal commands or light tactile stimulation. Interventions to maintain a patent airway, spontaneous ventilation or cardiovascular function may occasionally be required if conscious sedation is inadvertently exceeded.

   b. Deep sedation is defined by lack of purposeful response to verbal or physical stimuli. It may be associated with loss of the ability to maintain a patent airway, inadequate spontaneous ventilation and/or impaired cardiovascular function. It has similar risks to general anaesthesia, and requires an equivalent level of care.

4. Tumescent solution: Those solutions comprised of a local anaesthetic (typically lidocaine but not excluding bupivacaine), epinephrine and a physiologic saline.

5. Fat transfer: In this instance fat transfer refers only to autologous fat transfer.

6. Joint Position Paper: A statement of opinion issued collaboratively by more than one entity, where none of the entities represented presumes to claim expertise in each of the statements presented, though collectively do so.

POSITION

The four standards endorsed by RACS, and ASPS are set out as follows:

1. Liposuction or fat transfer
   Liposuction is considered a major cosmetic surgical procedure and the recommended maximum lipoaspirate of 2.5 litres that applies to hospital facilities is not appropriate within the unregulated office based setting.

   Liposuction within the office based setting should be limited to 250ml of lipoaspirate.

   In specific reference to fat transfer it is not recommended that buttock fat grafting be performed in an office-based setting.

   Liposculpture can be referred to as liposuction, or, liposuction and fat transfer; the guidance provided herein applies equally, irrespective of the terminology.

2. Local anaesthetic use in liposuction or fat transfer
RACS and ASPS believe that great care should be exercised in calculating the dose of local anaesthetic to be administered in an office based setting.

Caution should be exercised with doses administered particularly in comparison to a hospital or accredited Day Surgery environment in which resuscitation equipment and staff support are mandated.

- Systemic absorption of local anaesthetic agents is dependent on the dose administered, the specific agent, the patient’s weight, the speed and site of injection and the addition of other drugs to the local anaesthetic to reduce uptake into the circulation. As such, absolute “maximal safe doses” are difficult to define, being dependent on multiple factors. Practitioners should be familiar with the Product Information of agents being used, notwithstanding that a maximum recommended dose (in mg/kg) is not stated for all local anaesthetic agents.

- The health practitioner administering the local anaesthesia should, at a minimum,
  - Be registered with AHPRA as a qualified medical or dental practitioner (other than in the case of topical local anaesthetic cream)
  - Have a good understanding of local anaesthetic dose calculation and toxicity profiles
  - Be trained and certified competent in basic life support, with immediate access to appropriate resuscitation equipment

In the circumstance of tumescent infiltration of local anaesthetic for liposuction or fat transfer procedures in an office-based environment, the dose of lidocaine should not exceed 35mg / kg, and adrenaline should be mixed with the local anaesthetic.

It is should be noted that hyaluronidase or sodium bicarbonate can be added, however, due diligence must be paid to preclude any allergic reactions.

3. Risks of Patient related complications

RACS and ASPS recommend that all patients have appropriate pre-procedure consultation with assessment and documentation of medical conditions (if hyaluronidase or sodium bicarbonate will be used), regular medications, and allergies before undergoing an office-based procedure.

The American Society of Anaesthesiologists (ASA) published a widely used, five-category, physical classification system, used to assess fitness for surgery (defined below). Patients being considered for liposuction and/or fat transfer should be ASA Physical Status I or II.

- ASA I: A normal healthy patient.
- ASA II: A patient with mild systemic disease.
Maximal acceptable patient weight for any facility will be determined by factors including mechanical ratings of equipment and fixtures to allow safe manual handling, care of the patient and transport within the health-care facility.

RACS, and ASPS support the Royal Australasian College of General Practitioners ‘infection control standards for office based procedures’ document, directing all to abide by the information contained therein.

4. Informed consent

The patient should be informed of the risks of the procedure and accompanying local anaesthesia and sedation where used. Written patient consent (including financial consent) should be obtained prior to the procedure.

REFERENCES

Day Surgery in Australia Position Paper
Office-based procedures in Australia
ANZCA PS02 Statement on Credentialling and Defining the Scope of Clinical Practice in Anaesthesia
ANZCA PS07 Guidelines on Pre-Anaesthesia Consultation and Patient Preparation
ANZCA PS09 Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures
ANZCA PS15 Guidelines for the Perioperative Care of Patients Selected for Day Care Surgery

Additional information:
RACS Position Papers available at:
https://www.surgeons.org/policies-publications/publications/position-papers/
RACGP Infection prevention and control standards
https://www.racgp.org.au/your-practice/standards/infectioncontrol/