

ACCSM GUIDELINES FOR LIPOSUCTION SURGERY

1. Training and Education

Liposuction is performed by medical practitioners from a variety of specialties. All those who practice liposuction surgery should have adequate training and experience so they have the necessary skills to perform the procedures appropriately and the knowledge to diagnose and manage cardiovascular, surgical or pharmacological complications that may arise. They should also possess appropriate knowledge of the skin and subcutaneous tissues, of fluid and electrolyte balance as well as appropriate knowledge of anatomy. Practitioners ordering tumescent local anaesthesia mixtures must have a working knowledge of those drugs that can inhibit the cytochrome P450 system that metabolises lignocaine and can result in elevated blood levels of lignocaine. These drugs are listed in **APPENDIX 1**.

Adequate training and experience may be obtained by:

1. ACCSM cosmetic surgery Fellowship programme culminating in examinations.
2. ACCSM cosmetic medicine Fellowship programme if the liposuction option and examination has been successfully completed.
3. Residency training, in a surgical specialty other than cosmetic surgery, for example in plastic surgery or general surgery, provided that the programme does specifically provide adequate exposure to, and examination in, liposuction. Post-graduate training should include completion of PDE accredited didactic and live surgical training courses in Liposuction approved by ACCSM. In addition, training and education should include one-on-one hands on and observational training experiences in a proctorship or preceptorship setting with qualified practitioners of Liposuction techniques. This should not be assumed but proven by log book.
4. Completion of a formal course in liposuction surgery which has been peer reviewed and should contain
 - a. A core theoretical lecture programme
 - b. Observational training,
 - c. Hands-on, supervised practical training
 - d. Examination

An example of such a course is the Fellowship of Lipoplasty (ACCSM). Training in the ACCSM Registrar program may lead to attaining the Fellowship of Lipoplasty (ACCSM) and eventual listing in the Liposuction Register of the college, once all criteria is completed successfully. This Register is also open to Fellows who have demonstrated competence, skill and sufficient experience in the field of Liposuction.

2. Preoperative Evaluation

A documented medical history, physical examination +/- appropriate pathology tests based upon the patient's general health and age must be performed on all patients. The history should focus on dietary patterns, exercise and familial body shape as well as the specific regions of concern to the patient. A history of poor wound healing, bleeding abnormalities including hypercoagulable states, diabetes mellitus, syndrome X, cardiac arrhythmias, keloid formation and problems with past surgical procedures should be elicited. In addition, a history of infectious diseases such as hepatitis B or C or HIV and any history of allergies should be obtained. A personal or family history of thrombophlebitis, DVT, pulmonary emboli or multiple miscarriages may increase the risk of complications for that patient. Medication lists should be documented with special attention to aspirin, NSAIDs or anti-coagulants including those available from alternative medicine providers and health stores, for example, high dose vitamin E, ginkgo biloba and garlic, fish oil, omega 3. The practitioner should evaluate the patient's expectation of the procedure and verify that the patient is self-motivated to seek correction. As with any cosmetic procedure, the expectations should be reasonably attainable and not influenced by a body dysmorphic disorder or any other psychiatric condition. The surgical procedure should be explained, including the benefits, risks, expected outcomes and the possibility of the need for revisional procedures.

Thorough clinical examination should include a detailed evaluation of the regions to be treated and should also include a record of the presence or absence of herniae (abdominal, umbilical, inguinal & genital), venous varicosities, scars, cellulite and stretch marks. The quality of the skin, particularly its elasticity, and the presence of striae and dimpling should be evaluated. The underlying abdominal musculofascial system should be assessed for the presence of flaccidity, integrity and diastasis recti. The deposits of body fat should be recorded. Particular attention must be paid to evidence of body asymmetry and contour irregularities that may affect the ultimate aesthetic outcome.

It is recommended that patients be in good general health. If there are concerns about the health status of a prospective liposuction patient, a medical clearance from an appropriate physician is indicated.

Specific pathology tests may be indicated pre-operatively depending on the patient's medical history and clinical findings.

3. Consent Process

Consent is a process, not simply a signed consent form. The process should follow the "ACCSM guidelines for informed consent" published by the College and annexed here as

APPENDIX 2.

The Medical Board of Australia minimum requirements for informed consent for any practitioner who performs cosmetic procedures may be accessed online:

<https://www.medicalboard.gov.au/Codes-Guidelines-Policies/Cosmetic-medical-and-surgical-procedures-guidelines.aspx>.

“Medical Board of Australia – Guidelines for Registered Medical Practitioners who Perform Cosmetic and Surgical Procedures (1 Oct 2016)”

4. Indications

Indications for liposuction or the use of liposuction techniques include:

- a. Body contouring of the abdomen, legs, back, hips, arms, chin, buttocks & breasts to remove localised deposits of adipose tissue that do not respond to diet and exercise.
- b. Treatment of diseases such as lipomas, gynaecomastia, pseudogynaecomastia, Lipodystrophy, axillary hyperhidrosis and axillary bromidrosis.
- c. Harvesting of fat cells for transfer (grafting) to provide tissue augmentation and the correction of scars or tissue defects.
- d. Mobilisation of flaps, flap elevation and subcutaneous fat debulking in reconstructive procedures.

Note:

Weight loss is not considered an indication for liposuction surgery.

5. Techniques of Liposuction

Liposuction may be performed under simple sedation with local anaesthesia, IV sedation with local anaesthesia, with epidural blocks or under general anaesthesia.

- a. Liposuction with Local Anaesthetics - Tumescant liposuction:

This combines a technique of local anaesthesia and vasoconstriction with a methodology of subcutaneous fat removal. The profound local anaesthesia achieved eliminates the need for general anaesthesia and allows the procedure to be performed completely under local anaesthesia with minimal sedation. This method is associated with maximum safety, fastest recovery time and the least number of complications in liposuction patients. In 2022, many medical indemnity companies changed policies and limited the amount of fat that may be removed as outpatients, and mandated most procedures to be performed in licensed facilities depending on the amount of lipoaspirate removed. Adherence to the individual doctor's insurance policies is mandatory.

The common local anaesthetic used is Xylocaine diluted in normal saline, usually in a concentration range of 0.5 -1.0 g/l. Typically the total volume of infiltrate is equal to more than the total aspirated volume. It is mandatory to add adrenaline 1.0mg/l which produces vasoconstriction and minimises blood loss. Sodium bicarbonate is also often added (typically 10ml 8.4%/l) to reduce the discomfort of the infiltration of an acidic solution. This is called the Klein Solution. A less common addition is triamcinolone or dexamethasone used for its

anti-inflammatory properties. The dosages and amount of these agents may vary within recognised safe limits. Studies recommend a maximum dosage range of 35–55 mg of Xylocaine/kg of body weight is safe. The limit of 55mg/kg should rarely be exceeded. The safe dosage is dependent on the total volume of body fat and size of patient. Small patients with minimal body fat and those in the older age group should receive doses at the lower range level. Larger volume patients may receive doses approaching the 55 mg/kg level. If patients are taking drugs that can inhibit the cytochrome P450 system, these medications should be discontinued 2 weeks before surgery to eliminate their effect on Xylocaine metabolism. If they cannot be discontinued, consideration should be given to lowering the maximum dose of Xylocaine.

In summary, current recommendations are that lignocaine doses between 35 mg and 55 mg/kg can be used in tumescent anaesthesia administered for liposuction. Best current evidence suggests reducing this dose to 28 mg/kg for tumescent anaesthesia undertaken for other procedures. Despite the relative excellent safety record for this technique, the same care and caution for minimising the risk of Local Anaesthetic Systemic Toxicity (LAST) must be applied. (Plastic Surgery textbook- Principles and Practice 2022, Chapter 4 “Local Anaesthetics” – pages 37-48)

The reasons for the slow absorption of lignocaine in liposuction procedures are:

- I. Subcutaneous fat has a low volume of blood flow.
- II. Lignocaine is lipophilic and is easily sequestered in fat.
- III. Diluted adrenaline / epinephrine (adrenaline) in saline solution ensures vasoconstriction, thus minimising systemic absorption and bleeding.
- IV. The large volume of tumescent solution itself compresses blood vessels by hydrostatic pressure.
- V. The very low dilution of lignocaine in Klein’s solution does not achieve the gradient required for systemic absorption.
- VI. Most of the solution is removed during aspiration, minimising the duration available for absorption Reference 22

Mixing of tumescent local anaesthetic solutions should be done by trained personnel in accordance with the order of the practitioner. All solutions should be prepared on the same day of the procedure and all unused solutions should be discarded. Bags of solution should be labelled with the contents in each bag, name of patient, date and time prepared.

b. Liposuction under General Anaesthesia:

General anaesthesia may be used for liposuction surgery but some studies have shown Liposuction under general anaesthesia to be associated with higher rates of morbidity and mortality. (**Reference 23**). An overnight stay in the hospital following the procedure is advisable to minimise the risk.

c. Ultrasonic Assisted Liposuction (UAL) - Internal and External

Internal UAL is a recognised technique that appears to be safe, based on current reported experiences. This technique is recommended for use by practitioners who have extensive previous experience with conventional techniques and who have received additional post-graduate education and training dedicated to ultrasonic assisted liposuction. Some studies have shown a higher risk of complications with internal UAL. External ultrasound has been shown to be relatively ineffective for preoperative fat dissolution.

d. Laser, other Light based technologies, Power Assisted Liposuction and Waterjet Assisted Liposuction (WAL).

Newer technologies continue to emerge and potentially facilitate the process of liposuction. The onus is on the practitioner to obtain adequate education and training and to be able to demonstrate an anticipated additional benefit to patients before incorporating these newer technologies into his or her practice.

6. Megaliposuction

Megaliposuction is defined as a single stage removal of more than 6,000 ml of supranatant fat. The ACCSM recommends serial liposuction for the removal of large volumes of fat, rather than megaliposuction. Megaliposuction can be associated with higher rates of morbidity and mortality.

7. Recommended Volumes for Removal

The maximum volume of supranatant fat removed in a single procedure should be based on the number of body areas treated, the percentage of body weight removed and the percentage of body surface area covered by the surgery. It is recommended that the maximum volume of supranatant fat removed should not exceed 5% of the patient's body weight (without clothes) and should rarely exceed 5000 ml in any person in a single procedure irrespective of the number of areas treated, the gender of the person and the body size.

Total volume of Supranatant Fat that may be removed in each procedure is controlled by the Health Regulators in each State or Territory of Australia. Practitioners are advised to familiarise themselves with the regulations in the State they are practicing.

8. Multiple Concomitant Procedures

Studies have shown that combining Liposuction with other surgical procedures at the same time leads to increased morbidity and cannot be recommended

9. Surgical Setting and Monitoring

Tumescent liposuction may be performed on ambulatory outpatients in clinic based surgical facilities, free standing surgical facilities or hospital settings. It is recommended that these operating facilities have ACHS accreditation (or its equivalent) or adhere to equivalent

standards. Medical Indemnity companies will have their own criteria for each proceduralist, plus Australian state or territory regulations, so adherence to insurance requirements and health department regulations is mandatory.

Where local anaesthesia is used sedation may be in the form of:

Minimal: A drug-induced state, during which patients respond purposefully to verbal commands or light tactile stimulation.

Moderate: A drug-induced state of depressed consciousness during which patients retain the ability to respond purposefully to verbal commands and tactile stimulation.

Deep: A drug-induced state of depressed consciousness during which patients are not easily roused and may respond only to noxious stimulation.

“Deeper sedation” is characterised by depression of consciousness that can readily progress to the point where consciousness is lost and patients respond only to painful stimulation. It is associated with loss of the ability to maintain a patent airway, inadequate spontaneous ventilation and/or impaired cardiovascular function, and has similar risks to general anaesthesia, requiring an equivalent level of care. (ANZCA PG 9 Guidelines on Procedural Sedation)

Only anaesthetists should be administering deep sedation.

Neurolept anaesthesia or general anaesthesia may also be used during liposuction.

Whatever the type of anaesthesia used, the “Anaesthetic Guidelines Policy” of the ACCSM, together with the recommendations of the Australian and New Zealand College of Anaesthetists should be followed including those relating to the monitoring of the patient’s vital signs, ECG and pulse oximetry. Supplementary oxygen should always be available.
[https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09\(G\)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-\(PS09\)](https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09(G)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-(PS09))

IV access is mandatory where there is a possibility of loss of consciousness for any length of time and is recommended by ANZCA in the rare event of LAST (Local Anesthetic Systemic Toxicity). Intralipid should be available, as well as emergency resuscitative equipment and drugs.

Strict fluid balance during the procedure must be accurately observed. In a well-hydrated patient introduction of IV fluids may be unnecessary and can lead to the possible risks of pulmonary oedema and cardiac decompensation.

Liposuction must be performed using a sterile technique. Elimination of microorganisms is vitally important in preventing the spread of infection.. Instruments may be disposable or

sterilised with steam autoclaving. Appropriate cleaning of cannulae with ultrasound / washer-disinfector/steriliser prior to sterilisation is mandatory. Different state / territory health department regulations must be followed.

Appropriate and safe management of waste products must be in compliance with current local Health Department regulations.

10. Expected Sequelae and Outcomes

Outcome expectations should be based on realistic preoperative evaluation of the patient's age, skin elasticity, likely volume of fat to be removed and the areas to be treated. Best results are expected in younger patients, minor deformities, normal weight, elastic skin and small volume removal. Contour irregularities and skin texture changes are commonly seen especially in patients over forty and increase with ageing.

a. Common side effects:

Oedema, ecchymosis, dysaesthesia, fatigue, soreness, scarring, asymmetry and contour imperfections are expected sequelae.

b. Occasional side effects:

Persistent oedema, long term dysaesthesia, hyperpigmentation, pruritis, haematoma, seroma and drug or tape reactions.

c. Uncommon side effects:

Skin necrosis, severe haematomas, recurrent seromas, nerve damage, systemic infection, necrotising fasciitis, hypovolemic shock, intraperitoneal or intrathoracic perforation, deep vein thrombosis, pulmonary oedema, pulmonary embolism and loss of life have been reported but uncommon.

11. Post-operative Care and Medications

Post-surgical compression garments including binders, girdles, foam tape, closed-cell foam and other specialised equipment have been effectively utilised. The use of compression is considered important and appears to be most helpful in the first seven days following surgery. It assists in drainage of fluids, can minimise bruising, discomfort, haematoma or seroma formation and fluid shifts within the tissue. Compression garments may be worn for 1 – 4 weeks or longer. Antiphlebotic support stockings may be valuable for liposuction involving the lower extremities. These patients should be advised not to travel long distances during which they may be immobile for prolonged periods in the immediate post-operative period without first checking with their practitioners.

Prophylactic antibiotic therapy and oral corticosteroids may be used by some practitioners. Reasonable early ambulation of liposuction patients is advisable to avoid venous stasis and shorten the post-operative recuperation period. Patients should resume their usual exercise activities as comfort allows. Lymphatic drainage massage techniques are known to reduce the risk of excessive oedema and induration sometimes seen in the post-operative period.

Patients should be provided with a written, understandable post-operative instructions which should include the doctor's after-hours telephone number and a post operative appointment.

Discharge of the patient should be in accordance with Facility Accreditation Standards or equivalent. Discharge of the patient into the care of a sensible adult is strongly recommended. Patients should not be allowed to drive themselves home in a motor vehicle. Warnings of the danger of operating machinery, driving or performing tasks involving physical or mental concentration within 24 hours should be discussed with the patient at consultation and further reminded of this at discharge.

12. Documentation of Care

Standardised pre-operative and post-operative photographs should be taken. Patients' weight and height (BMI) should be recorded prior to the procedure. The operative record should include, at a minimum, the following information:

- a. Quantity and type of tumescent fluid infused.
- b. Total dosages of drugs given
- c. Technique utilised.
- d. Type of anaesthesia.
- e. Anatomical sites treated.
- f. Total volume of aspirated fluid and fat.
- g. Volume of supranatant fat.
- h. Drains (if placed)
- i. Post-operative garments utilised.
- j. Documentation of the follow up appointment time

Practitioners should review and compare before and after photographs to objectively evaluate the quality and extent of final outcomes. Patient satisfaction or otherwise should be established.

13. Credentialling for Liposuction Practitioners

Credentialling in hospitals, day surgery centres or clinic-based surgical facilities should follow appropriate guidelines required to grant privileges for adding any surgical procedure. The National Standard produced by the Australian Council for Safety and Quality in Health Care, entitled "Standard for Credentialling and Defining the Scope of Clinical Practice" should form the basis of the determination of competence and the granting of liposuction operating privileges. This standard ensures that practitioners are credentialled on the basis of their relevant professional competence and not on the basis of their membership of any particular

College, Society or Association. Practitioners seeking privileges in liposuction should be prepared to submit evidence of their training, qualifications, experience and ongoing continuing medical education and continuing professional development (CPD) activities relevant to liposuction. Clinical experience may be derived from and/or verified by evidence of preceptorship training with a qualified experienced liposuction practitioner for a reasonable number of procedures to adequately determine satisfactory technique and patient management. The preceptor should have current privileges at an accredited facility (peer review/quality assurance reviewed) to perform such procedures, and be willing, without bias, to observe and evaluate the applicant practitioner. The number of procedures required may be determined at the local facility according to published guidelines and should be adequate to evaluate pre-operative, intra-operative and post-operative case management. If required confidential case evaluations should be provided, in writing, to the appropriate committee or board granting surgical privileges. Any conflict that may arise between preceptor and applicant practitioner should be resolved according to regulations and by-laws of the facility and / or hospital. The Fellowship of Lipoplasty (ACCSM) awarded by The Australasian College of Cosmetic Surgery and Medicine (ACCSM) can be accepted as an achievement of competence in Liposuction.

The method of choice of Liposuction Training under the auspices of the College should be Tumescent Liposuction under Local Anaesthesia. Registrars in training must demonstrate successful completion of Tumescent Liposuction Training, regardless of the final method of choice used by the post-graduate upon receiving Fellowship status. While it is also essential to receive instruction on Liposuction under General Anaesthesia and the College recognises the safety record of individual College Fellows and others performing Liposuction under General Anaesthesia, however, this method is probably associated with higher risks.

14. CPD

Annually, liposuction practitioners are encouraged to obtain continuing medical education/professional development (CPD) credits specifically in the field of liposuction and related surgery. This may be in the form of current scientific publication review, video tapes, attendance and presentation at scientific conferences, courses or workshops and peer review of case management.

15. Recording Adverse Events

It is the practitioner's duty and responsibility to report any adverse event, including, without limitation, significant morbidity and mortality as required by local or state regulations. Report should also be provided to the practitioner's professional organisation, in this case, The Australasian College of Cosmetic Surgery and Medicine (ACCSM) in order to provide statistical tracking of such events.

16. Disclaimer

These Guidelines provide information to consider when contemplating liposuction surgery. The Guidelines are not intended to be all-inclusive or otherwise limit the inquiry and consideration applicable to one who is considering liposuction surgery. The Guidelines neither

endorse nor make any representation regarding the qualifications, capabilities, skill or competence of any individual practitioner. The Guidelines present general information for educational purposes only and are not intended nor should it be used as a substitute for professional medical advice. ACCSM expressively disclaims all responsibility and liability arising from your use of or reliance on the Guidelines and assumes no responsibility or liability for any claims that may result directly or indirectly from your use of the information.

Bibliography

ACCSM GUIDELINES FOR LIPOSUCTION SURGERY

1. The American Academy of Cosmetic Surgery: 2006 Guidelines for Liposuction Surgery. *Am J Cosm Surg* 2006; Vol. 23, No. 4, 169-177.
2. American Society for Dermatologic Surgery: ASDS Guidelines of Care for Tumescent Liposuction. *Dermatol Surg* 2006; 32: 709-716.
3. ANZCA: Guidelines on conscious sedation for Diagnostic, Interventional, Medical and Surgical Procedures; Review PS9 (2005)
4. Coldiron B: Office Surgical Incidents: 19 Months of Florida Data. *Dermatol Surg* 2002; 28: 710-713.
5. Coleman WP, Hanke CW, Lillis P, Berstein G, & Narins R: Does the location of the Surgery or the Specialty of the Physician affect Malpractice claims in Liposuction ?. *Dermatol Surg* 1999, 25: 343-347
6. Coleman WP, Hanke CW & Glogau RG: Does the Specialty of the Physician affect Fatality Rates in Liposuction ? A Comparison of Specialty Specific Data. *Dermatol Surg* 2000; 26: 611 – 615
7. Coleman WP, Glogau RG, Klein JA, Moy RL, Narins RS, Chuang TY, Farmer ER, Lewis CW, Lowery BJ, & the Guidelines/Outcome Committee: Guidelines of Care for Liposuction. *J Am Acad Dermatol* September 2001: 438 – 447.
8. Grazer FM, & de Jong RH: Fatal Outcomes from Liposuction: Census Survey of Cosmetic Surgeons. *Plastic & Reconstruct. Surg. Jan* 2000; 436 -446.
9. Housman TS, Lawrence N, Mellen BG, George MN, Filippo JS, Cerveny Jr. KA, Demarco M, Feldman SR, Fleischer Jr. AB : The Safety of Liposuction: Results of a National Survey. *Dermatol Surg* 2002; 28: 971-978.
10. Hanke W, Cox SE, Kuznets N, & Coleman III WP: Tumescent Liposuction Report Performance Measurement Initiative: National Survey Results. *Dermatol Surg* 2004; 30: 967-978
11. Iverson RE, Lynch DJ, and ASPS Committee on Patient Safety: Practice Advisory on Liposuction. *Plastic & Reconstructive Surg.* April 15, 2004: 1478 – 1490.

12. Kenkel JE, Noble D, Robinson JB & Rohrich RJ : Hemodynamics, Electrolytes and Organ Histology of Larger-Volume Liposuction in a Porcine Model. *Plast Reconstr Surg* 2004 April 15: 113 (5): 1391-1399
13. Klein JA: Tumescant Technique - Tumescant Anaesthesia & Microcannular Liposuction. Mosby 2000
14. Molton M: ACCS National Survey of Complications in Tumescant Liposuction. *Presentation at 2006 ACCS Conference in Adelaide.*
15. Molton M: Safety of Liposuction in Australia. *Aust. Journal of Cosmetic Surgery* 2007: Vol 3: (1) 50 – 54.
16. Rao RB, Ely SF, Hoffman RS : Deaths related to Liposuction. *N Eng J Med* 1999: 340 : 1471 – 1475
17. Rohrich RJ, Leedy JE, Swamy R, Brown SA & Coleman J: Fluid Resuscitation in Liposuction : A Retrospective Review of 89 Consecutive Patients. *Plast Reconstr Surg* 2006 Feb: 117 (2) : 431-435
18. Scarborough DA, Herron JB, Khan A, & Bisaccia E : Experience with more than 5,000 cases in which Monitored Anesthesia Care was used for Liposuction Surgery. *Aesth. Plast. Surg.* 2004: 27: 474 - 480

Additional references:

19. [https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09\(G\)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-\(PS09\)](https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09(G)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-(PS09))
20. <https://www.medicalboard.gov.au/codes-guidelines-policies/cosmetic-medical-and-surgical-procedures-guidelines.aspx>
21. <https://www.sciencedirect.com/science/article/pii/B9780323653817000046>
Yasmin Ziabari: Plastic Surgery Principles and Practice 2022, Chapter 4 (Local Anaesthetics) pages 37-48
22. Microcannular tumescant liposuction. *Indian J Dermatol Venereol Leprol.* 2007 Nov-Dec;73(6):377-83. doi: 10.4103/0378-6323.37053.
23. Starling, John; Thosani, Maya K; Coldiron, Brett M. Determining the Safety of Office-Based Surgery: What 10 Years of Florida Data and 6 Years of Alabama Data Reveal *Dermatologic Surgery* 38(2 Part 1):p 171-177, February 2012. | DOI: 10.1111/j.1524-4725.2011.02206.x

APPENDICES

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NB. The Australian and New Zealand College of Anaesthetists have published their 2022 guidelines and these are now recommended.

[https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09\(G\)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-\(PS09\)](https://www.anzca.edu.au/getattachment/c64aef58-e188-494a-b471-3c07b7149f0c/PG09(G)-Guideline-on-sedation-and-or-analgesia-for-diagnostic-and-interventional-medical,-dental-or-surgical-procedures-(PS09))

APPENDIX 1

ACCSM GUIDELINES FOR LIPOSUCTION SURGERY

CYTOCHROME P450 3A4 INHIBITORS AFFECTING XYLOCAINE METABOLISM

Acetazolamide	Nefazodone (Serzone)
Alprazolam (Xanax)	Nelfinavir (Viracept)
Amiodarone (Cordarone)	Nevirapine (Viramune)
Anastrozole (Arimidex)	Nicadipine (Cardene)
Cannabinoids	Nifedipine (Adalat)
Cimetidine (Tagamet)	Norfloxacin (Noroxin)
Clarithromycin (Biacin)	Norfluoxetine
Cyclosporin	Omeprazole (Losec)
Danazol (Danocrine)	Paroxetine (Paxil)
Diazepam (Valium)	Quinidine
Diltiazem (Cardizem)	Remacemide
Erythromycin	Ritonavir (Norvir)
Felodipine (Plendil)	Saquinavir (Invirase)
Fluconazole (Diflucan)	Sertinadole
Fluoxetine (Prozac)	Sertraline (Zoloft)
Fluvoxamine (Luvox)	Stiripentol
Indinavir (Crixivan)	Terfenadine (Seldane)
Isoniazid	Triazolam (Halcion)
Itraconazole (Sporanox)	Troglitazone (Rezulin)
Ketoconazole (Nizoral)	Troleandomycin (TAO)
Metronidazole (Flagyl)	Verapamil (Veracaps)
Mibefradil (Posicor)	Zafirlukast (Accolate)
Miconazole (Monistat)	Zileuton (Zyflo)
Midazolam (Hypnovel)	
Naringenin (Grapefruit Juice)	

CYTOCHROME P450 1A 2 INHIBITORS

Anastrozole (Arimidex)	Ketoconazole (Nizoral)
Caffeine	Mexiletine (Mexitil)
Cimetidine (Tagamet)	Mibefradil (Posicor)
Ciprofloxacin (Ciproxin)	Naringenin (Grapefruit Juice)
Clarithromycin (Biaxin)	Norfloxacin (Noroxin)
Diethyldithiocarbamate	Omeprazole (Losec)
Diltiazem (Cardizem)	Paroxetine (Paxil)
Enoxacin (Penetrex)	Ritonavir (Norvir)
Erythromycin	Tacrine (Cognex)
Fluvoxamine (Luvox)	Zileuton (Zyflo)
Isoniazid	

APPENDIX 2

Approved guidelines for informed consent

Informed consent is a process not just a piece of paper. For the consent to be optimal, what occurs during this process must vary depending on the nature of the procedure, the specific circumstances of the patient and, in some circumstances, the procedure specific experience of the doctor.

An optimal consent process is desirable for two reasons: Firstly, it is ethical and patients have a right to it. Secondly it can reduce litigation. The latter is obviously a benefit to doctors but it also benefits patients by reducing costs.

When a patient sues, they can allege the doctor has been negligent in two ways, failure to treat and/or failure to warn. If a facial nerve is damaged during a facelift for example, failure to treat would include cutting or cauterising the nerve, whereas failure to warn would be not having advised the patient preoperatively that this could occur.

In the case of cosmetic surgical procedures, successful negligence allegations for failure to warn should be 100% avoidable. This is because all the procedures are elective, so there is unlimited time for the complete consent process to occur, and the risks and complications are known.

However, since these procedures do not treat pathological conditions and there are no health consequences of not having the procedure, the level and detail of the disclosure of the risks and complications required to optimise the consent process is very high.

These guidelines refer to invasive procedures which have a significant risk of an adverse long-term outcome. For example, they would not therefore be relevant to temporary fillers or botulinum toxin treatment but would apply to laser resurfacing, chemical peels with the potential to affect the dermis and to permanent fillers.

1. The patient must have at least one consultation, preferably a face-to-face meeting, with the doctor performing the procedure before the day of surgery.
2. For geographical reasons it is sometimes impractical for patients to meet the doctor face to face for their initial consultation. In these circumstances it may be acceptable for the patient to send photographs to the doctor and then for the doctor to have a telephone / video consultation with the patient. This may be considered to be the initial consultation with the doctor performing the procedure. If the patient elects to proceed the doctor must see the patient face-to-face before the procedure,

preferably at least one day before. It may be acceptable that there may be instances where, for logistical reasons, this face-to-face meeting can only occur on the day of surgery but this should not be considered the norm. The liposuction proceduralist must comply with individual medical indemnity requirements on non-face-to-face consultations.

3. If there is an initial consultation with someone other than the doctor performing the procedure, this is not an acceptable substitute for the process described in 1 and 2 above which should still occur.
4. If the doctor is inexperienced in the specific procedure contemplated, either because the doctor is new to the procedure or because the procedure itself is new, this should be disclosed to the patient at the first consultation. The doctor must inform the patient if he or she has performed the procedure less than 100 times.
5. At the end of the initial consultation the patient should be provided with a procedure-specific consent form to consider at home. The ACCSM can provide procedure specific consent forms but individual members should check with their own insurer that the form is acceptable to them.
6. The patient should be told, and it should be stated on the consent form, to contact the doctor, by telephone or at another consultation, if they have any questions or need clarification of the consent form.
7. If there is doubt about which procedure would be most appropriate for a patient, they should be encouraged to seek a second opinion.
8. There should be a “cooling off” of at least 7 days between the initial consultation with the doctor performing the procedure and the procedure itself.
9. Under no circumstances should either the first face-to-face consultation with the doctor performing the procedure, or the signing of the consent form, take place after the patient has taken or been given any sedation.