From:	[redacted]
To:	Cosmetic Surgery Review
Cc:	David Watters
Subject:	OFFICIAL - Sensitive: Submission to the independent review on cosmetic surgery
Date:	Thursday, 7 April 2022 3:50:00 PM
Attachments:	Guideline for providers of liposuction - consumer summary.docx VPCC April response to Public-consultation-Independent-review-of-cosmetic-surgery.docx Guideline for providers of liposuction March 2022 FINAL (1).docx David Watters.msg

Mr. Andrew Brown
Independent Reviewer

Attached is the Victorian Perioperative Consultative Council (VPCC) submission to the independent review on cosmetic surgery.
Working group draft guidelines, for providers and consumers of liposuction are included.

Professor David Watters, the chair of the VPCC, can be contacted at [redacted]

regards

[redacted]
Senior Project Officer, Consultative Councils Unit (VPCC)

Centre of Patient Safety and Experience

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Response template for submissions to the *Independent review of the regulation of medical practitioners who perform cosmetic surgery*

You are invited to have your say about the regulation of medical practitioners (doctors) who perform cosmetic surgery by making a submission to this independent review.

The consultation questions from the consultation paper are outlined below. Submissions can address some or all of these questions, and you can include any evidence or examples that you think are relevant.

Submissions can be emailed to:

Mr Andrew Brown, Independent Reviewer
marked '*Submission to the independent review on cosmetic surgery*' at CSReview@ahpra.gov.au.

The closing date for submissions is 5.00pm AEST 14 April 2022.

Your details

Name	Professor David Watters
Organisation (if applicable)	Victorian Perioperative Consultative Council
Email address	[redacted]

Your responses to the consultation questions

Codes and Guidelines

1. **Do the current *Guidelines for registered medical practitioners who perform cosmetic medical and surgical procedures* adequately address issues relevant to the current and expected future practice of cosmetic surgery and contribute to safe practice that is within a practitioner's scope, qualifications, training and experience?**
Generally, they do address the issues (if followed), but clearly the 2016 guidelines have not prevented inappropriate and unethical practice. There are opportunities to improve the current guidelines. The guidelines are a good start but can certainly be improved. VPCC supports the cooling off period, not paying any deposit during this cooling off period, and is supportive of the need for psychological assessment in under 18 year olds, and whenever there may be mental health or body dysmorphia issues involved for any adult. We also support the guidelines on the issue of dis-allowing loan schemes and funding streams other than credit cards to pay the costs of the procedure(s).
2. What changes are necessary and why? What additional areas should the guidelines address to achieve the above purpose?
In the definitions the term "surgeon" is not made clear. Although true, the definitions around the differences between a plastic surgeon, plastic surgeons doing cosmetic or reconstructive surgery, and a medical practitioner performing cosmetic are not explained enough to be understood by a member of the public. There is also no mention of other Specialist training programs (eg ENT and General Surgery with RACS or the Australasian College of Dermatologists. The training, expertise and experience required to perform major cosmetic surgery (including liposuction) is not detailed or outlined. There should be a requirement to participate in CPD in relation to the cosmetic surgery, and participation in audit and peer review to ensure recency of practice, process and outcomes are appropriate. Facilities performing major cosmetic surgery should be required to have medical practitioner credentialing for the procedures they are licensed to perform and credentialing practice should be available for scrutiny by the State and Territory bodies responsible for accrediting a facility (in Victoria this is the Department of Health). There needs to be a limitation on the volume of liposuction (a major procedure) that can be performed on an individual patient in a day procedure facility at any one time. The concept of a maximum volume needs to be agreed (VPCC believes an absolute maximum should be 5L, but in smaller individuals it might be 3L). There is no statements regarding the requirements for anaesthesia, nor postoperative care, nor the training and expertise required. We believe for major cosmetic surgery the treating medical practitioner should be available for at least 24 hours (to avoid fly-in, fly-out practice). The section on managing complications and arrangements for emergency care could be expanded and made more clear. Does a day hospital have an agreed arrangement for 24 hour emergency access with a nearby hospital, and does the medical practitioner have any pre-agreed arrangements with a colleague who has admitting rights to a nearby hospital with overnight facilities in the event of complication? The [redacted] reluctance by a small number of cosmetic surgeons to recognise major complications, even discouraging hospital or emergency department attendance by those suffering from those complications, is suggestive of a lack of professionalism and ethics. The guidelines do cover this but could be more explicit.

3. **Please provide any further comment in relation to the use of codes and guidelines relevant to the practice of cosmetic surgery.**
VPCC believes it is important to avoid having more than one practitioner working on the same body area at any one time. Whilst the use of an assistant is encouraged, two practitioners performing liposuction is unsafe. The guidelines could consider addressing the issues of additional procedures. There is a single mention of revisional/further surgery. More detail on this should be considered. Fat storage for later use, if practised - this is a grey area - should have specific requirements outlined covering sterility, documentation, temperature (ultra-low -80C freezer).

Management of notifications

4. **Having regard to Ahpra and the Medical Board's powers and remit, what changes do you consider are necessary to the approach of Ahpra and the Medical Board in managing cosmetic surgery notifications, including their risk assessment process, and why?**
5. Please provide any further relevant comment in relation to the management of notifications about medical practitioners involved in cosmetic surgery.
VPCC believes there should be a State/national registers of medical practitioners accredited to perform major cosmetic surgery and the procedures for which they are accredited. These could be managed through the State/Territory accreditation/licensing process but there is a need for members of the public to know who is credentialed to perform major cosmetic surgery. The fundamentals of this credentialing should be training, qualifications, recency of practice, participation in CPD including audit/peer review appropriate to scope of practice.

Advertising restrictions

6. Is Ahpra and the Medical Board's current approach to regulating advertising in cosmetic surgery sufficient?
VPCC believes the advice in the guidelines on advertising is appropriate. However, it appears many medical practitioners advertising on their website have been not following the guidelines, so there needs to be more ongoing review.
7. What should be improved and why and how?
Practitioners websites and advertising should be inspected at intervals.
8. Do the current Guidelines for advertising a regulated health service adequately address risks in relation to advertising of cosmetic surgery, or is a more specific regulatory response required?
VPCC recommends the current guidelines are strengthened with regards the use of testimonials and also that any regulated health service (this includes day hospitals) should be required to list the risks of any [cosmetic] procedure advertised.
9. Does the promotion of cosmetic surgery via social media raise any issues that are not adequately addressed by the advertising guidelines, or that require any specific regulatory response?
The use of social media should be regarded as similar to advertising on a website and subject to the same restrictions/standards: "If you are advertising a regulated health service, your advertising must not: • be false, misleading or deceptive, or likely to be misleading or deceptive • offer a gift, discount or other inducement, unless the terms and conditions of the offer are also stated • use testimonials or purported testimonials about the service or business • create an unreasonable expectation of beneficial treatment • directly or indirectly encourage the indiscriminate or unnecessary use of regulated health services." A dot point should be added around the outlining the potential risks and complications of any procedure.
10. Please provide any further relevant comment in relation to the regulation of advertising.
There needs to be a specific section in the regulations around advertising/promoting a service through social medial by either the medical practitioner or the facility.

Title protection and endorsement for approved areas of practice

11. To what extent would establishing an endorsement in relation to the practice of cosmetic surgery address relevant issues of concern in the sector (including patient safety issues)?

The term “surgeon” in the medical (as opposed to the veterinary or tree) context should be reserved for Fellows of an accredited specialist medical College. The term “cosmetic surgeon” is confusing and sometimes misleading for a member of the general public. A medical practitioner who is entitled to use the term “surgeon” should have undergone a minimum of five years supervised training in a surgical specialty under one of the accredited specialist medical Colleges (RACS, RANZCO, RANZCOG or Dentistry/OMS).

12. Would establishing an endorsement in relation to cosmetic surgery provide more clarity about the specific skills and qualifications of practitioners holding the endorsement?
Yes
13. What programs of study (existing or new) would provide appropriate qualifications?
Surgical training requires a minimum of 5 years in a surgical specialty. This should enable the title surgeon to be used. To perform cosmetic surgery VPCC recommends evidence of a training program that includes a minimum of 100 supervised cases in addition to training around risks and complications. It should be noted that the incidence of complications in cosmetic surgery is low and therefore extra training modules in case selection, decision making and the management of complications will be required as a medical practitioner performing liposuction or other cosmetic surgery may not have experienced many complications. Training is more than numbers of cases.
14. Please provide any further relevant comment in relation to specialist title protection and endorsement for approved areas of practice relevant to cosmetic surgery.
It should be clear to a potential patient whether the medical practitioner performing cosmetic surgery is a surgeon or a medical practitioner without Specialist medical qualifications. It should also be clear to a member of the public what training someone performing cosmetic surgery has had. For this reason VPCC recommends a cosmetic surgery/liposuction registry and appropriate credentialing of medical practitioners in all regulated/accredited facilities.

Cooperation with other regulators

15. Are there barriers to effective information flow and referral of matters between Ahpra and the Medical Board and other regulators?
There should be better information flow between State/Territory departments of Health (their regulatory departments) and Ahpra.
16. If yes, what are the barriers, and what could be improved?
When there are practitioners of concern there should be clear and open channels of communication between State and Ahpra, involving the facilities as appropriate.
17. Do roles and responsibilities require clarification?
Yes
18. Please provide any further relevant comment about cooperating with other regulators.

It is not possible usually to involve Colleges as there are too many Colleges/Professional bodies whose members perform major cosmetic surgery. The regulation needs to work at State/Territory level, and Ahpra (National level) and there should not be communication delays when there are issues of potential harm to the public.

Facilitating mandatory and voluntary notifications

19. Do the Medical Board's current mandatory notifications guidelines adequately explain the mandatory reporting obligations?

Yes

20. Are there things that prevent health practitioners from making notifications? If so, what?

Yes, fear of legal backlash.

Feedback on outcome of a notification and the length of time taken for a decision

Lack of information flow between centres that perform cosmetic surgery (usually day hospitals) and the health services that manage complications that have no visibility as to whether this is a "one-off" complication or there is a pattern. The health service providing emergency care is usually focused on the patient and their well being and getting them cured.

21. What could be improved to enhance the reporting of safety concerns in the cosmetic surgery sector?

A requirement to have comprehensive audit and reporting of complications and denominators.

Ensure evidence of audit, peer review and CPD is provided to regulators at State/Territory level

Ensure a medical practitioner working across more than one State and Territory is still required to provide a whole practice audit rather than selective ones for each State and Territory.

22. Please provide any further relevant comment about facilitating notifications

Information to consumers

23. Do the Medical Board's current codes and guidelines adequately describe the obligations of practitioners who perform cosmetic surgery to provide sufficient information to consumers and obtain informed consent?

More is needed, though the current codes, if adhered to and interpreted correctly are a good foundation.
24. If not, what improvements could be made?
VPCC will provide a consumer guideline draft that is in draft format for Victoria.
25. Should codes or guidelines include a requirement for practitioners to explain to patients how to make a complaint if dissatisfied?
Yes, undoubtedly.

26. In the context of cosmetic surgery, does the Ahpra website and public register of practitioners provide sufficient information about medical practitioners to inform consumer choices?
No
27. If not, what more could/should Ahpra and the Medical Board do to inform consumer choices?
Have a cosmetic surgery registry and make clear the difference between a medical practitioner and a Specialist surgeon.
28. Is the notification and complaints process understood by consumers?
Rarely
29. If not, what more could/should Ahpra and the Medical Board do to improve consumer understanding?
Produce a consumer guideline on cosmetic surgery (see Victorian example for liposuction)
30. Please provide any further relevant comment about the provision of information to consumers.

VPCC believes a consumer guide is necessary and have attached the current draft Victorian version for your information.

Consumers need more information and explanation of their rights and the responsibilities of the practitioners and to be informed as to the training, expertise and outcomes of those they are consulting.

They should particularly be warned against practitioners who advise/advertise accessing superannuation or re-mortgaging to pay for cosmetic surgery. Your guidelines are clear that a clear statement of the costs should be provided but there should be no advice given as to how to access funding or links to financial institutions/brokers.

Further comment or suggestions

31. If you have any further comment relevant to Ahpra's and the Medical Board's regulation of cosmetic surgery including and/or suggestions for enhancements not mentioned in response to the above questions, please provide it here.

VPCC is attaching its draft liposuction guideline covering the most commonly performed major cosmetic procedure, and the subject of a great deal of recent publicity. Please note we commenced this guideline prior to the 4 Corners Program in October 2021, having identified a cluster of serious liposuction complications across the State. This guideline has been written with the Regulatory division of the Victorian Department of Health, also with consumer input, and informed by feedback from a wide range of stakeholders.

Note from the independent cosmetic surgery review:

The Victorian Perioperative Consultative Council's (VPCC) original submission to the independent review on 7 April 2022 included draft best practice guidelines for clinicians and those involved in the provision of liposuction.

Subsequent to their original submission, the VPCC advised the review that the guidelines had been updated and finalised.

At the request of the VPCC, the review has agreed to not publish the draft guidelines and instead has published the final guidelines as part of the VPCC's submission.

Guideline for providers of liposuction

Best practice guideline for clinicians and those involved in the provision of liposuction

OFFICIAL

VICTORIA State Government | Department of Health

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Contents

Membership of working group

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Professor David Story	Chair of Safety and Quality committee, Australia and New Zealand College of Anaesthetists (ANZCA), Specialist Anaesthetist
Dr Joni Feldman*	Cosmetic Surgeon, Fellow of ACCSM, Fellowship of Lipoplasty (ACCSM)
Ms Sharryn Mckinley	Perioperative Nurse, CEO/DON of a day surgery centre.
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*Professor Mark Ashton and Dr Joni Feldman were members of the working group for their technical knowledge of the topic and not as representatives of any professional body, society or college.

Definitions

Abdominoplasty	**Full abdominoplasty** – whereby the rectus abdominis muscle is tightened, the navel is adjusted and excess skin and fat is removed. **Mini abdominoplasty**, or wedge excision – whereby the excess fat and skin beneath the umbilicus is removed only. Adjunct liposuction is permissible.
Anaesthesia	
i. **General**	General anaesthesia is a drug-induced state characterised by absence of purposeful response to any stimulus, loss of protective airway reflexes, depression of respiration and disturbance of circulatory reflexes. General anaesthesia is sometimes indicated during diagnostic or interventional medical or surgical procedures and requires the exclusive attention of an anaesthetist, or other trained and credentialed medical practitioner within his/her scope of practice.[1]
ii. **Sedation**	Conscious sedation is defined as a drug-induced depression of consciousness during which patients are able to respond purposefully to verbal commands or light tactile stimulation. Interventions to maintain a patent airway, spontaneous ventilation or cardiovascular function may, in exceptional situations, be required. Conscious sedation may be achieved by a wide variety of drugs including propofol and may accompany local anaesthesia. All conscious sedation techniques should provide a margin of safety that is wide enough to render loss of consciousness unlikely. 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.[1]
iii. **Major regional analgesia, this includes tumescent infiltration**	Tumescent infiltration falls into the category of major regional analgesia on the grounds that where a significant dose of local anaesthetic is administered, systemic toxicity may occur due to absorption or inadvertent intravascular injection.
Brazilian Butt Lift	Gluteal augmentation, commonly known as the Brazilian Butt Lift, is the process of recontouring the lower back and loins with liposuction, reinjecting the unwanted fat to augment the upper buttocks in order to create a pert lifted effect.[3]

Cosmetic surgery	Operations that revise or change the appearance, colour, texture, structure or position of normal bodily features with the dominant purpose of achieving what the patient perceives to be a more desirable appearance or boosting the patient's self -esteem. [4] Cosmetic surgery is not covered under the MBS unless there is a specific medical indication.
Lignocaine	Lignocaine (also called lidocaine) is a local anaesthetic frequently used in liposuction procedures. While serious adverse events are rare, toxicity associated with excess blood levels of lignocaine include fitting, coma, and cardiac arrythmias which can be fatal.
Liposuction	Liposuction (suction assisted lipectomy or SAL) refers to the closed removal of fat via suction cannulas (blunt tipped metal tubes). It can be performed under general anaesthetic, and/or under local anaesthetic.
Lipoaspirate volume	When referring to lipoaspirate volumes in this document this is understood to mean the total volume of aspirate, including infiltrate, blood and fat. The aspirate (what is aspirated or suctioned out) that is part of the liposuction procedure is composed of a mixture of fat, some blood and frequently a degree of pre-liposuction infiltration fluid. The composition and proportions of the aspirate depends on a variety of factors, including (but not limited to) how much infiltration is used, and how long it is left in the tissues before liposuction begins.[4]

Background:

Liposuction is the most popular cosmetic surgical procedure performed worldwide.[1] Since its advent in the 1970's and 1980's it has become a fundamental tool in the field of aesthetic surgery for neck, breast, face, trunk, and extremities for body contouring. It is considered by the Medical Board of Australia to be a major surgical procedure.[4] Cosmetic surgery, to alter one's physical appearance for aesthetic rather than medical reasons, primarily takes place in the private sector. Liposuction is only available through the public system for specific medical indications. For example, it is an important adjunct in revisional surgery after breast and other reconstructive surgery.

Most liposuction procedures for aesthetic purposes are carried out as day cases with patients not requiring an overnight stay. Liposuction is a service which is regulated in Victoria and can only be performed in a facility registered with the Department of Health. A facility will have been issued with a certificate of registration that includes liposuction as one of its prescribed procedures. Registration to perform liposuction is not required only when volumes of adipose tissue of 200ml or less are treated in a medical practitioner's rooms.

Scope:

This document applies to:

- all liposuction procedures over 200mls, which are required in Victoria to be performed in a registered facility
- all health services and practitioners providing liposuction
- all forms of liposuction, irrespective of the method used, dry, tumescent, super-wet etc.
- liposuction regardless of the method of anaesthesia.
- liposuction performed in conjunction with other procedures.

Tumescent anaesthesia and analgesia techniques may also be used in some other procedures, notably gender confirmation surgery and breast augmentation surgery. These are beyond the scope of this guideline. Use of the tumescent anaesthesia techniques for liposuction outlined in this guideline should not be assumed to be safe or appropriate for other procedures.

Patients with medical conditions such as lymphoedema, lipoedema, lipodystrophies are not suitable for liposuction in a day procedure centre and should only be done in a facility that has provision for overnight stay because of higher surgical risk of bleeding and associated comorbidities.

This guideline should be read in conjunction with 'Guidelines for registered medical practitioners who perform cosmetic medical and surgical procedures Medical Board of Australia | 1 October 2016', and ANZCA's PG 15 (POM) 'Guidelines for the perioperative care of patients selected for day procedures.'

The same principles should apply to all liposuction procedures irrespective of where they are performed. This includes liposuction under 200mls that may be performed in the practitioner's rooms.

This guideline should be regarded as a living document whilst National and State-wide reviews are being undertaken with regards to the practice and accreditation of cosmetic surgery. In the future, the guideline may be revised to include any changes in accreditation requirements.

Admission criteria for day procedures:

- The patient being considered for liposuction should be suitable for a day procedure and would not be expected to require an overnight stay. Note that day procedure cases are limited to ASA (American Society of Anaesthesiologists Physical Status Classification System)[12] 1 & 2.
- All patients should have a preoperative clinical assessment and screening for health risks and comorbidities (see below). Patients with significant comorbidities should be managed in a hospital setting, with overnight facilities, capable of managing, perioperative cardiovascular events and respiratory compromise. Patients not suitable for treatment in a day procedure centre include, but are not limited to:
  - ASA category 3 and above.
  - Patients with obstructive sleep apnoea
  - Patients with known or family history of malignant hyperthermia
  - Patients with a history of a difficult airway (even if an anaesthetist is present)
  - Patients with a BMI>35
  - Patients who live alone and who have no one to transport them home or to monitor them overnight
- **Patients under the age of 18.** As per the Medical Board of Australia there are additional responsibilities when providing cosmetic medical and surgical procedures for patients under the age of 18 (see below). The Board expects that medical practitioners are familiar with relevant legislation of the jurisdiction in relation to restrictions on cosmetic surgery for patients under the age of 18.

Patient assessment

- Pre-admission clinical assessment by the clinician performing the liposuction procedure, as per Medical Board of Australia guidelines, should take place at least seven days prior to admission
- The clinical assessment should include but not be limited to:
  - ASA classification
  - Height, Weight, BMI
  - Clinical screening for comorbidities
  - Medication list
  - Known drug and other medically relevant allergies
  - Screening for infectious foci in the skin, subcutaneous tissue or other sites (and also on the day of the procedure)
  - Psychological assessment
  - Social assessment, including where the patient lives, support at home and arrangements for the immediate postoperative period.

  If the patient has significant underlying psychological problems, for example body dysmorphia, they should be referred to a psychologist. In these circumstances, the procedure should not proceed without clinical clearance by an appropriately qualified mental health professional. For the patient under the age of 18, the cooling off period must be a minimum of three months.[4]
- All patients **under the age of 18** must be referred for evaluation to a psychologist, psychiatrist or general practitioner who works independently of the medical practitioner performing the

procedure. This is to identify any significant underlying psychological problems which may make the patient an unsuitable candidate for the procedure.[4]

Liposuction should be delayed if the patient has:

- any infections – local or systemic – but particularly in the skin
- any flu-like, respiratory or possible COVID symptoms
- poorly controlled diabetes Hba1c >75mmol/mol (9%).
- any chest pain or shortness of breath on the day
- any arrythmia detected. Newly detected arrythmias require appropriate investigation.
- unexplained hypertension
- taken anticoagulants
- had a recent vaccination, or has one scheduled within 2 weeks of procedure
- had COVID within the previous 8 weeks or suffers from post COVID sequelae.
- the patient has a psychiatric or psychological illness that is not adequately controlled or has not been appropriately assessed.

Informed consent and shared decision making

The patient's informed consent should cover the procedure(s) to be performed, the alternatives and options for management, including not proceeding with liposuction, what to expect in the postoperative period, the potential complications, their likelihood, and what to do if they occur. Informed consent must involve a detailed conversation, not merely obtaining a signature on the consent form.

It should also include informed financial consent covering the **total** expected cost of the procedure, including anaesthetic charges and facility fees and **any** other associated costs such as compression garments.

The patient has the right to withdraw consent at any time. The patient may incur some booking costs due to late notice cancellations, but may not be charged the fee, or part thereof, when they have withdrawn their consent for the procedure.

The practitioner's credentials should form part of the informed consent process. The patient should be made specifically aware of the practitioner's and anaesthetist's training and credentialing.

Medical Practitioners performing liposuction

All practitioners must be able to provide evidence of competency in the provision of liposuction. Facilities' that are accredited to perform liposuction must be able to demonstrate a credentialing process that ensures their practitioners are adequately trained, up to date and participate in audit and peer review of their procedural outcomes.

Large volume liposuction using tumescent anaesthesia in a day procedure centre, over 200mls, is a technique that is not necessarily part of any accredited specialist training programme.

ALL medical practitioners who perform liposuction must be able to demonstrate that they have undergone supervised training, are competent in the procedure and are compliant with ongoing professional development specific to liposuction.

All medical practitioners, including specialists of any AMC-accredited medical College, should be registered with AHPRA, without conditions or undertakings relating to their practice of liposuction, or other conditions relevant to the procedure.

Their credentials will include one or more of the following:

- Medical practitioners who can demonstrate a minimum of 100 supervised liposuction procedures, some of which (at least 5 procedures) should include the part of the body to be treated. They should be practising within their approved scope of practice by the facility in which they are performing the procedure.
- A Fellow of the Royal Australasian College of Surgeons with a Fellowship in Plastic and Reconstructive Surgery, trained in liposuction and practising within their approved scope of practice by the facility in which they are performing the procedure.
- A Fellow of the Royal Australasian College of Surgeons in a different surgical specialty from Plastic and Reconstructive Surgery, or another Specialist Medical College, who has been trained in liposuction and is practising within their approved scope of practice by the facility in which they are performing the procedure.
- A Fellow of the Australasian College of Dermatologists trained in liposuction and practising within their approved scope of practice by the facility in which they are performing the procedure.

Credentialing

Medical staff

As stated above the clinical staff must be registered with AHPRA, trained and certified in resuscitation and compliant with regulatory and specialist/professional CPD requirements for their profession. The medical practitioner or specialist must be appropriately trained and experienced (see above), but also some of their CPD activity should align with their scope of practice in liposuction.

Anaesthesia and higher risk sedation should be provided by a specialist anaesthetist (fellow of the Australian New Zealand College of Anaesthetists) or, in some circumstances, a GP anaesthetist who will be a fellow of Royal Australian College of General Practitioners (RACGP) and/or Australian College of Rural and Remote Medicine (ACRRM) and has received further training in anaesthesia.

Nursing staff

The nursing staff must be registered with AHPRA, trained and certified in resuscitation, compliant with the regulatory and professional CPD requirements for their profession, and have recent experience in perioperative practice, have a good understanding of the relevant standards and guidelines relating to postoperative recovery and recognition of/response to clinical deterioration. These include those published by the Australian College of Perioperative Nurses (ACORN), the Australian College of PeriAnaesthesia Nurses (ACPAN) and the Australian & New Zealand College of Anaesthetists (ANZCA). It is preferable that nurses have a postgraduate perioperative

qualification. It is recommended that nurses be members of a relevant perioperative nursing group such as (ACORN) or (ACPAN).

Facilities and equipment

The day procedure centre must be an accredited, registered facility, with approved infection-control practices, and readily available, functional resuscitation equipment. The treatment rooms must be accessible to all emergency services, and the facility must be safe in terms of equipment, ventilation, and other hazards. Such a facility should be subject to planned and random inspections as part of its accreditation. The facility must be able to provide evidence that clinically facing staff are appropriately credentialed. The facility must be able to provide evidence of audit and peer review in relation to its clinical activity and perioperative outcomes (see below).

All equipment must be TGA approved, with an audited service/maintenance register.

The procedure of liposuction

Liposuction is performed to remove unwanted adipose tissue (fat), improve body contouring or provide fat cells for tissue augmentation. The various techniques of liposuction are described below. Each will vary regarding the volume of pre-liposuction infiltrate required as well as amount of fat (and fluid) aspirated as well as the technical aspects of the procedure. In Victoria tumescent liposuction is the most commonly used technique.

Tumescent liposuction – a technique where extensive infiltration is used, often with a ratio of 3:1.

Wet or superwet liposuction – a procedure where pre-infiltration is used and usually a similar volume of fat to the amount of infiltrate used is aspirated. For wet liposuction a ratio of infiltrate to aspirate is around 1:2 and for superwet, the ratio is 1:1.

Dry liposuction – no pre-liposuction infiltration is used.

Water assisted liposuction (WAL) – a technique with a continuous flow of water into the patient that is simultaneously sucked out.

Power assisted liposuction (PAL) – mechanical vibration of a power assisted hand piece help to ease fat extraction – usually used with a super wet technique.

EVL (expansion vibration liposuction) – similar to PAL but with the power assisted hand piece used for the infiltration as well as the aspiration.

Laser and ultrasound assisted liposuction – additional technology used to dissolve the fat prior to fat extraction.[5]

Liposuction volumes

Any facility in Victoria performing more than 200 ml of liposuction is required to be registered by the Department of Health.

Five litres (5 L) is the maximum amount of volume that should be removed at any one time.

If a technique of liposuction is used that leaves fluid in the body, the predicted volume of this tumescence should be included in the 5 L.

This maximum volume should be lower for smaller patients.

The maximum volume of 5 L is applicable to the tumescent protocol for liposuction, which is the most common technique adopted for cosmetic liposuction. For other forms of liposuction the maximum volume that can be aspirated is considerably less.

Where the dry technique is adopted a volume of 5 L is not deemed to be safe. The technique of dry liposuction is reserved for smaller volume reconstructive surgical procedures.

The maximum limits for water assisted liposuction should also be reduced.

Practitioners must not decrease tumescent volumes in a bid to increase total lipoaspirate volumes as this poses an increased and unnecessary risk to patients. If volumes are expected to exceed the maximum recommended volumes, then the procedure should be conducted in more than one session.

Sterility

All liposuction needs to be performed in a sterile manner, using surgical aseptic techniques, including a sterile field, according to the regulations in relation to accredited facilities.

Prophylactic antibiotics

Liposuction carries a small risk of infection. Practitioners vary in whether they give a single dose of prophylactic antibiotics for every case. The use of prophylactic antibiotics should be certainly considered in selected higher risk patients.

Studies have shown that those at higher risk of infection include patients who smoke, and those who suffer from diabetes or other comorbidities that impair the immune system. Patients with higher BMI's are also more prone to surgical site infection.

When infection occurs, prompt antibiotic treatment is required. A patient with signs or symptoms of infection requires early review, ideally in-person. Any infection can become more serious potentially resulting in the development of necrotising spread of infection throughout the whole area that has been treated, potentially requiring intensive management with extensive resection and multiple corrective procedures.

Tumescent protocol for liposuction under local anaesthesia

This represents major regional analgesia:[7]

The **maximum** dose of lignocaine is recommended to be **45 mg/kg** lignocaine for local tumescent liposuction. Lignocaine should only be administered with added adrenaline.

For tumescent liposuction under **general anaesthesia 35 mg/kg** lignocaine is the **maximum** recommended dose. This lower maximum dose is recommended because anaesthetic drugs affect the pharmacokinetics of lignocaine.

Formulation of tumescent anaesthesia

It is expected that the concentration of lignocaine would be 800mg/l to 1000mg/l.

(This can be varied as some areas are more sensitive/painful for example the upper abdomen.)

To this fluid adrenaline and bicarbonate will be added.

The dose of adrenaline should be 1-2mg/litre(1:1000) and the dose of sodium bicarbonate should be 10ml of 8.4 per cent sodium bicarbonate per litre of infiltrate.

There is a maximum total safe dose of adrenaline and this should be further reduced in the presence of arrythmias or cardiac disease.

It is expected that each litre of tumescent fluid infiltrated equates to the same volume of lipoaspirate out.

The dose of lignocaine is weight dependent.

Examples

If the maximum dose is **45mg/kg** lignocaine then:

100 kg person – maximum does of lignocaine is 45 x 100 which = 4500mg

In the scenario of the 100 kg person above using a concentration of 1000mg of lignocaine per litre the maximum tumescent infiltration is therefore 4.5 litres and to **each** litre bag of tumescent infiltration fluid and a maximum of 1mg of adrenaline (1:1000) and 10 ml of 8.4 per cent sodium bicarbonate is added.

If the person is 60 kg - maximum dose of lignocaine is 45 x 60 which = 2700mg total lignocaine

In the scenario of the 60 kg person above using a concentration of 1000mg of lignocaine per litre the maximum tumescent infiltration is therefore 2.7 litres.

Procedural monitoring

Intravenous access should be obtained prior to commencing major regional analgesia and maintained for the duration of administration of medication for that analgesia.[2,7] Intravenous fluids should be available to manage hypovolaemia.

The monitoring of a patient undergoing any type of anaesthesia, which includes a major regional analgesia, should include regular assessment and recording of the following:

- Circulation - by detection of the arterial pulse and supplemented by measurement of arterial blood pressure. Where blood pressure monitoring is omitted, this decision must be clinically justifiable. The intervals between recordings of this data will depend on clinical circumstances and the stability of the patient and should be according to clinical need and in accordance with ANZCA guidelines.
- Attention should be paid throughout the procedure to the patient's wellbeing and haemodynamics.
- Ventilation - continuously monitored.
- Oxygenation – in conjunction with clinical observation of the patient. Adequate lighting must be available to aid with the assessment of patient colour.[6]

For further guidance on procedural monitoring please refer to ANZCA PG18A (2017) Guideline on monitoring during anaesthesia and ANZCA PG03A (2014) Guideline for the management of major regional analgesia. For procedures performed under sedation refer to ANZCA guideline PS09.

Complications

Complications associated with liposuction include, but are not limited to, venous thromboembolism, abdominal viscus perforation, pneumothorax, diaphragmatic injury, major vessel or nerve injury, fat embolism, infection, lignocaine toxicity, electrolyte imbalance and fluid overload. Whilst rare, any of these complications can be life threatening.

Medical practitioners performing liposuction should be aware of the potential complications, their recognition and management, including the need to urgently refer a patient to a health service with emergency and overnight facilities.

Patients undergoing liposuction should be made aware that complications can occur and what to do if they feel unwell following the procedure.

Avoiding inadvertent injury

Performing liposuction around the trunk, chest and abdomen carries a risk of perforation of the internal viscera. Therefore, liposuction in this area should only be performed by practitioners who are experienced and able to ensure the cannula remains within the appropriate plane. The practitioner must always have a clear understanding of the anatomical location of the tip of the canula. The practitioner must select a cannula size which is appropriate for the procedure being undertaken. An appropriate cannula size is normally one of 4mm or less. Larger canula sizes are only used for specific indications. An appropriate type of canula tip should be chosen.

Although two proceduralists may perform liposuction together, only one proceduralist may be working in any one body area at a time.

The facility credentialing the practitioner must ensure that the area to be subjected to liposuction is within the practitioner's scope of practice.

Postoperative monitoring

The patient should be monitored by a registered nurse with experience of perioperative care for a period of 1-4 hours depending on the volume of fat and tumescence aspirated.

For further guidance refer to ANZCA PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures 2018 and to the relevant ACPAN guidelines. [14,15,16,17,18]

Discharge and follow up care

In the event of post discharge deterioration, on the night of surgery, an appropriate adult must be present with the patient who can make contact with the treating medical practitioner, and/or take the patient to an emergency department (consider social factors). Patients who live alone and/or have nobody appropriate to stay with them overnight should not undergo liposuction in a day procedure centre.

The treating medical practitioner or their delegate **must** be available and contactable in the 24 hours after surgery. It is best if the treating medical practitioner has admitting rights to a local hospital or has made prior arrangements with another physician who has those rights and is able to take over care. In the event of deterioration or complications requiring hospital admission the treating medical practitioner is responsible for coordinating care until the patient is under management by that hospital or Ambulance Victoria. In the absence of admitting rights or

arrangements with a medical practitioner with those admitting rights the treating medical practitioner must have a clear protocol for managing deterioration or complications in a timely manner. Should handover of care be required, a direct person to person conversation between the two practitioners should occur before transfer.

The medical practitioner performing the liposuction should be available for an in-person review on the night following surgery in case there is a major event or significant deterioration. The treating physician must review the patient's progress 1-3 days after surgery, with further follow up after one week.

For further guidance please refer to ANZCA PS15 Guideline for the perioperative care of patients selected for day stay procedures 2018.

Other procedures

Brazilian butt lift (BBL)

The BBL is a procedure which carries a higher risk than liposuction alone and a higher risk than many other cosmetic procedures. There is a higher risk of fat embolism and death than with other cosmetic procedures.

Medical Practitioners who perform this procedure should:

- graft fat only into subcutaneous tissue, above the deep fascia
- avoid intra-muscular injections of fat
- inject the harvested fat using significantly thicker cannulas >4mm
- avoid downward injections[13]

Patients seeking BBL should be reviewed by their GP and/or a psychologist after initial consult with the medical practitioner performing the procedure. This should occur before the procedure takes place.

In 2018 the Multi-Society Gluteal Fat Grafting Task Force issued a safety advisory urging practitioners to re-evaluate their technique in relation to this procedure and made the statement that the death rate of approximately 1/3000 is the highest for any aesthetic procedure.[11] There is a later study in 2019, reporting improvement in Brazilian Butt Lift (BBL) safety and providing current recommendations from ASERF, ASAPS, and ISAPS[13]. The 2019 study indicated a decreased mortality, which will need to be confirmed by further reports.

Liposuction combined with other procedures

It is well documented that patients undergoing liposuction combined with other procedures, particularly abdominoplasty, have a higher risk of complications. [9,10]

Full abdominoplasty - alone or in combination with liposuction, **radical abdominoplasty is not deemed to be a suitable procedure to be conducted in a day procedure setting.**

Wedge excision of soft tissue in combination with liposuction - where the volume of lipoaspirate exceeds 1000 ml, **the maximum weight of the soft tissue should not exceed 500g** or the liposuction should be conducted in a separate, additional procedure on a different date following full recovery from the first procedure.

Fat transfer

The volume of fat transfer at any one session should be limited to a maximum of 1000 ml.

Delayed fat transfer

Fat storage is not recommended. There are significant risks associated with fat storage. These risks are not warranted for cosmetic procedures. In the rare circumstance where fat is to be stored it must be stored in an alarmed, ultra-low temperature storage -80ºC freezer. Fat should never be stored in a commercial fridge or standard freezer. Where fat is harvested and then stored in an ultra-low (-80ºC) freezer, there needs to be clear documentation recording and labelling of the fat and the process by which it was harvested, stored and reintroduced, including date of harvest and documented continuous monitoring of the temperature of which the fat is stored. All elements of harvesting, storage and reintroduction must be conducted in a sterile manner according to bio-tissue regulation. Clinicians must be familiar with and abide by specific contraindications to delayed transfer of any tissues.

Reporting and audit

The facility should provide timely, accurate and verifiable data to Victorian Admitted Episodes Dataset (VAED) on activity and conduct longer term audit of patient experience and outcomes, including any complications that occur in the first 30 days after surgery. These audits should be subject to peer review appropriate to the craft group of the practitioner.

Audit should include, at a minimum:

- lipoaspirate volumes and total local anaesthetic dose
- adverse reactions to medications or procedure
- discharge information provided to patient including contact information
- any post procedural complications, eg infection, inadvertent injury,
- need for post procedural antibiotics
- unplanned return to theatre, at any facility
- unplanned presentations to emergency department and admissions to hospital
- patient, family/significant other and colleague complaints.

Complaints and open disclosure

Practitioners and facilities are required to adhere to the regulatory requirements and standards for complaints management and open disclosure, including the *Health Services (Health Service Establishments) Regulations 2013*, Australian Open Disclosure Framework and the Complaint Handling Standards under the *Health Complaints Act 2016.*

Patients and their significant others have a right to complain and to escalate their complaint to the appropriate authorities including but not limited to, AHPRA, the Health Complaints Commissioner and the Victoria State Government Department of Health. A person making a complaint must not be adversely affected because the complaint has been made.

In the event of settling a complaint about a complication, or conducting open disclosure, patients should not be asked to sign non-disclosure agreements or similar undertakings

Medical tourism

Credentialing and regulatory requirements vary between countries. It is important to be aware of the credentials and experience of those performing the procedure. This document provides a guide to the credentialing and training requirements in Victoria.

Facilities and their practitioners providing liposuction are expected to provide high standards of sterility, but even where these exist, any cosmetic procedure carries a small risk of infection.

Patients considering travelling overseas for cosmetic procedures should be aware that the regulatory standards vary between countries. There is the risk that facilities may not provide a similar standard of sterility to those in Victoria. It is also important, just as it is in Australia, to be aware of the credentials of those providing the cosmetic procedure and those responsible for monitoring recovery or managing complications afterwards.

There have been cases of serious and life-threatening infection developing in procedures performed overseas, although these have also occurred in Victoria. There is also an added potential risk of infection with multi-resistant micro-organisms which may limit the options for, and outcomes of, antibiotic treatment.

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Further reading

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ANZCA PG15(POM) Guideline for the perioperative care of patients selected for day stay procedures 2018

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Appendix

Endorsements & Acknowledgments:

This guideline was developed by the working group for the development of a liposuction guideline and is endorsed by the following colleges, societies and organisations;

Australian and New Zealand College of Anaesthetists (ANZCA)

Australian Society of Plastic Surgeons (ASPS)

Australian Society of Aesthetic Plastic Surgeons (ASAPS)

Australian College of Dermatologists (ACD)

Australian College of Perioperative Nurses (ACORN)

Royal College of Surgeons (RACS)

Australian College of PeriAnaesthesia Nurses (ACPAN)

Australian College of Rural and Remote Medicine (ACCRM)

Cosmos Clinic

Safer Care Victoria (SCV)

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