


TRAINEE FOCUS

What you need to know about gender-affirming healthcare

Rona CARROLL ¹ and Fiona BISSHOP²¹Department of Primary Health Care and General Practice, University of Otago, Wellington, New Zealand, and ²Holdsworth House Medical Practice, Brisbane, Queensland, Australia

Introduction

Transgender people (both binary and non-binary) may have negative experiences when they attend for emergency care. Misgendering, refusing to use affirmed names and pronouns, disbelieving people's gender identities and transphobic mocking, joking and voyeurism have all been reported. Abundant literature confirms this, and fear of discriminatory attitudes often deters trans people from seeking essential medical care.^{1–3}

We both have years of clinical experience in providing gender-affirming healthcare and have leadership roles within our respective professional associations for transgender health (PATHA and AusPATH). We see first-hand how important it is for patient wellbeing and outcomes that all areas of the health system have knowledge and understanding in this area, and we hope this article contributes to improving trans and non-binary patient experiences when seeking emergency healthcare. In this article, we focus mostly on medical transition, which is also known as gender-affirming hormone therapy (GAHT) and discuss aspects that

have relevance for emergency healthcare professionals.

General principles

It is important to ensure you are using the patient's desired name and pronouns when calling them from the waiting room, writing notes and in discussions with colleagues. Many trans and non-binary people report experiences of misgendering when attending for emergency healthcare, and this simple act of respect can make an enormous difference to your patient's experience. It is also important to be considerate of a person's preferred language when describing their anatomy, and this can be simply done by asking them how they would like their body parts to be referred to (e.g. 'chest' rather than 'breasts').

Gender-affirming healthcare, also known as transition, is an individual process that can address many aspects of a person's gender affirmation. It may include social transition, such as clothing, hair, voice and pronouns, legal aspects, such as name changes to legal documents; and medical and surgical care. There are multiple ways to transition and

everyone is unique in their needs in this area. Do not make assumptions about patients' gender identity based on which aspects of transition have or have not been undertaken. This is a very personal decision, and not all transgender people want or need hormones and/or surgery. Access to gender-affirming healthcare is intrinsically linked to improved mental health outcomes, and for many people is life-saving treatment.⁴ Funding and availability of gender-affirming medical and surgical treatments varies and patients are not always able to access the care that they desire.

In large surveys of trans people accessing medical care, respondents have made strong recommendations about how to improve care.⁵ These include:

- Do not discuss gender identity with other healthcare providers unless this is relevant to care.
- Do not ask about gender transition or surgeries unless it is relevant to care.
- Use affirmed names and pronouns including when speaking to other team members.
- Incorporate preferred names/pronouns into registration forms.
- Call out last names only when in a group waiting area.

Gender-affirming hormone therapy

GAHT may be started by a range of health professionals such as endocrinologists, sexual health physicians, adolescent physicians and general practitioners (GPs). Pathways to access care vary between regions

Correspondence: Dr Rona Carroll, Department of Primary Health Care and General Practice, University of Otago, 23A Mein Street, Newtown, Wellington 6242, New Zealand. Email: rona.carroll@otago.ac.nz

Rona Carroll, MBChB, Senior Lecturer, General Practitioner; Fiona Bisshop, MBBS, General Practitioner.

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and increasingly there is a move away from an assessment-based secondary care pathway, towards an informed consent approach where hormones can be started in primary care by GPs. Mandatory psychological assessments are often viewed as pathologising by patients, whereas an informed consent approach recognises that adults with capacity to consent have the bodily autonomy to make their own decisions about transition, when they are well informed by the prescriber. Prescribing is based on national guidelines.^{6,7}

Feminising (or oestrogen based) GAHT

Feminising GAHT may be used by people who are assigned male at birth and identify as transgender or non-binary. This involves using a form of oestrogen and a testosterone blocker. Tables 1 and 2 describe the medications which can be used, including dosages and the variation in available funded options between Australia and Aotearoa New Zealand.

Physical effects come on gradually over time and include reversible changes such as softer skin, redistribution of body fat and irreversible changes such as breast growth and reduced sperm production. Everyone should be offered fertility preservation to store sperm prior to commencing oestrogen based GAHT as infertility is likely. While body and facial hair growth slow

down, they do not stop, and a more permanent method of hair removal is required if this is desired. Bone structure, laryngeal prominence and voice are unchanged by hormone therapy, but gender-affirming voice therapy with a speech therapist can help.

Table 3 summarises the risks of GAHT. There is an increased risk of venous thromboembolism, which can be reduced by favouring the use of transdermal oestrogen and spironolactone. People with increased cardiovascular risk factors should be supported to make an informed decision (weighing the risks of GAHT with the risks of not using it for them personally) and encouraged to use patches at the lowest effective dose.

Blood pressure and blood tests (LFTs, lipid profile, oestrogen and electrolytes for those on spironolactone) are usually monitored 3-monthly in the first year after starting and thereafter 6–12-monthly. It is important to note that while cyproterone results in testosterone suppression, even at very low doses, spironolactone acts peripherally to block the effect of testosterone on the tissues, and so serum levels may not reduce (therefore there is no need to measure testosterone in someone on spironolactone). Serum oestrogen levels are a poor measure of exogenous oestrogen and therefore not used to guide dosing. Oestrogen levels are, however, used to ensure supraphysiological levels,

and therefore increased risk is avoided.

Masculinising (or testosterone based) GAHT

Masculinising GAHT may be used by people who are assigned female at birth and identify as transgender or non-binary. This involves using a form of testosterone such as injections or transdermal options. Table 4 describes the testosterone formulations available, including dosages and the variation in available funded options between Australia and Aotearoa New Zealand. Note also that if you are checking a person’s testosterone level, the timing of the blood test varies depending on which formulation is used.

Testosterone causes permanent effects such as deepening of the voice, facial hair growth and genital changes. Genital changes include clitoral growth of around 1–3 cm and vaginal dryness. This can result in discomfort with speculum examinations (so generous lubrication should be used), and care should be taken to ensure both physical and psychological comfort if this examination is conducted. Be aware this may be a source of extreme distress. Ensure excellent communication, offer a support person, be patient-led and trauma-informed, and obtain informed consent.

Amenorrhoea occurs after 3–6 months in around 90% of people taking testosterone, but for some, bleeding will continue. Options for

TABLE 1. *Feminising gender-affirming hormone therapy oestrogen options*

Oestrogen formulation	Standard dose	Comments	Available
Estradiol valerate (Progynova)	2–4 mg od (max 6 mg)		NZ and Australia
Estradiol hemihydrate (Zumenon)	2–4 mg od (max 6 mg)		Australia
Estradiol patch (Estradot)	100–150 mcg patch twice weekly	Lower risk of VTE than oral; not metabolised via liver	NZ and Australia
Estradiol gel (Sandrena)	1–2 mg daily	Low VTE risk	Australia
Estradiol s.c. implant	100 mg 6 monthly	Must be compounded	Australia

NZ, New Zealand; od, once daily; SC, subcutaneous; VTE, venous thromboembolism.

TABLE 2. *Feminising gender-affirming hormone therapy androgen blockers*

Androgen blocker	Standard dose	Comments	Available
Spirolactone	100–200 mg od	Measured testosterone level not usually suppressed. Monitor potassium with dose changes.	NZ and Australia
Cyproterone	12.5–25 mg every 1–2 days	Use lowest effective dose as long term use of high doses is linked with meningioma. Can increase risk of VTE.	NZ and Australia

NZ, New Zealand; od, once daily; VTE, venous thromboembolism.

TABLE 3. *Risks of gender-affirming hormone therapy*

Risk level	Feminising hormones	Masculinising hormones
Increased risk	VTE disease Gallstones Elevated liver enzymes Weight gain Hypertriglyceridaemia Cardiovascular disease	Polycythaemia Weight gain Acne Androgenic alopecia Sleep apnoea
Increased risk with presence of additional risk factors		
Low risk	Hypertension Hyperprolactinaemia or prolactinoma	Elevated liver enzymes Hyperlipidaemia
Low risk with presence of additional risk factors	Type 2 diabetes	Cardiovascular disease Hypertension Type 2 diabetes

VTE, venous thromboembolism.

TABLE 4. *Masculinising gender-affirming hormone therapy options*

Formulation	Standard dose†	Comments	Available
Depo-testosterone (testosterone cypionate)	200 mg i.m. every 2 weeks	Can be self-administered Check T level mid-way between injections	NZ
Sustanon (testosterone esters) and primoteston (testosterone enanthate)	250 mg/mL i.m. every 3 weeks	Can be self-administered Check T level mid-way between injections	NZ and Australia
Reandron (testosterone undecylate)	1000 mg i.m. every 10–14 weeks	Must be given by a health professional Check T level just prior to next dose	NZ
Testogel/testavan testosterone gel	2–4 actuations daily		Australia

†Some people (usually non-binary assigned female at birth) may prefer to use a lower dose of testosterone, sometimes referred to by patients as ‘micro-dosing.’ There is no evidence to suggest that this results in less of the effects of standard testosterone doses, and certainly, all permanent effects can still occur, but it does allow more patient control over the speed of physical changes. To ensure cardiovascular and bone health, it is suggested that the testosterone level should be maintained above 5–6 nmol/L. NZ, New Zealand; T, testosterone.

menstrual cessation are the same as for cis-women and will depend on whether contraception is required. Although amenorrhoea is common, it is still possible to become pregnant, and contraception (if relevant) should be used as testosterone is harmful to a developing fetus. Long-acting reversible contraceptive options such as a progesterone containing implant/rod or intrauterine contraceptive device are often preferred. If there is new-onset vaginal bleeding after a period of amenorrhoea, ensure testosterone levels are adequate and consider investigating other causes as appropriate.

Polycythemia is one of the potential risks of GAHT listed in Table 3. If the haematocrit is elevated above 0.54 L/L the testosterone dose can be reduced, and advice sought from a haematologist or endocrinologist. Therapeutic venesection may be an option. Remember to use the male reference range for full blood count normal ranges.

Blood pressure and blood tests (LFTs, lipid profile, full blood count and testosterone) are usually monitored 3-monthly in the first year after starting and thereafter 6–12-monthly. Note the timing of the testosterone blood test depends on which formulation is used (Table 4). In someone on standard doses, the testosterone level should remain in the normal male reference range, and in someone on low

dose testosterone, the level should be maintained above 5–6 nmol/L.

Conclusion

When a trans person attends for emergency care and is treated in a respectful and affirming manner, they are more likely to remain engaged in medical care. Having a healthcare provider who is familiar with gender-affirming care increases patient confidence and comfort.

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Competing interests

None declared.

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