## Physical Health Concerns in Transgender Individuals

There are general concerns around stigmatisation of transgender individuals in healthcare which results in fear and reluctance to seek help. In addition, healthcare professionals can attribute health concerns to being transgender which can impact on engagement of trans people in healthcare settings and consequently affect care received. <sup>1</sup>

Increasing numbers of transgender individuals are commencing cross-sex hormone therapy, many of whom will progress to gender reassignment surgery. Most patients progress through treatment in Gender Identity Clinics (GIC's) in the UK but there are a significant portion of people who obtain hormones through unofficial routes and 'self medicate'. People taking feminising or masculinising hormones may be at increased risk of physical health issues such as thromboembolic events and development of type 2 diabetes amongst others. As such, they require long-term physical health monitoring.

Members of the transgender community are also at increased risk of mental health issues. <sup>2</sup> It is therefore likely that mental health professionals will encounter patients who are already established on hormone therapy which may or may not be appropriately monitored. An understanding of the physical health monitoring of such patients is important in both reducing the risk of physical complications and signalling to patients that as mental health professionals we are aware of their health care needs which would certainly foster engagement.

There are internationally accepted criteria for the initiation of hormonal therapy <sup>3</sup>. In most cases patients are assessed against these criteria at their local Gender Identity Clinic. In the West of Scotland this is hosted in the Sandyford. Individuals must meet the following criteria in order to commence hormone therapy:

- 1. Persistent, well-documented gender dysphoria
- 2. Capacity to make fully informed decision and to consent for treatment
- 3. Age of majority (there is separate Child and Adolescent guideline)
- 4. If significant medical/mental health concerns present, must be reasonably well controlled

In selected circumstances, it is possible to start hormones on patients who do not fulfil these criteria – for example, patients who have started hormones themselves.

A baseline assessment prior to initiating hormones consists of a detailed medical, family and psychiatric history. Of particular relevance are cardiovascular risk factors, as both oestrogen and testosterone therapy are associated with metabolic and thromboembolic complications. Baseline investigations are performed in all patients (FBC, U&Es, LFTs, lipids, fasting blood glucose and TFTs). Baseline testosterone or oestrogen levels are

performed depending on the patients' gender assigned at birth. Male-to-female patients should also have a baseline prolactin level measured as exogenous oestrogen can be associated with development of prolactinoma. Sexual health screening +/- relevant vaccinations should be considered at this point. Patients with significant physical co-morbidities should be referred to their local endocrinology service.

The importance of lifestyle factors (smoking, diet, exercise, alcohol) should be emphasised from the outset, particularly due to cardiovascular risks associated with hormone therapy but also the potential implications if patients intend to progress to surgery.

There is regularly updated information relating to hormonal treatment and monitoring available on the website of the National Gender Identity Clinical Network for Scotland's website (<a href="www.ngicns.scot.nhs.uk">www.ngicns.scot.nhs.uk</a>). This is an excellent resource for staff and patients within NHS Scotland.

There is a relative lack of large-cohort studies to study the long-term effects of hormone therapy. However, the current literature suggests that it is safe for transgender individuals to be prescribed cross-sex hormone therapy under supervision. Although associated with various physical health complications, there has been no proven direct link between hormone therapy and increased mortality. Any mortality in individuals prescribed cross-sex hormones could be attributable to other causes such as increased incidence of suicide, AIDS and substance abuse. <sup>4</sup>

There are certain physical health risks associated with both oestrogen and testosterone hormone therapy, and others associated with the individual hormones. For example, both are associated with increased cardiovascular risk, development of type 2 diabetes, and impaired fertility (gamete storage should be discussed prior to starting hormones). Oestrogen therapy for male-to-female (MTF) transgender individuals is associated with venous thromboembolism (VTE) - it is therefore recommended that patients over the age of 40 years are prescribed transdermal oestrogen patches instead of oral preparations to reduce this risk. The main risk associated with testosterone therapy in female-to-male (FTM) transgender individuals is polycythaemia therefore regular FBC monitoring is recommended.

An important aspect of physical health monitoring in transgender patients is that of cancer screening. Transgender individuals are often overlooked when it comes to national cancer screening programmes. Both MTF and FTM (unless they have undergone chest reconstruction surgery) patients should undergo breast screening as would be the case for natal females. FTM patients should undergo cervical screening if cervical tissue remains (i.e. they have not undergone hysterectomy). MTF patients will remain at risk of prostate cancer as with natal males, so clinicians should remain vigilant if these patients present with lower urinary tract symptoms.

Once patients are stabilised on their hormonal treatment monitoring can be undertaken on an annual basis within primary care. Monitoring includes

measurement of blood pressure and routine bloods. Response to treatment can be monitored by assessing serum hormone levels and adjusting doses of prescribed hormones accordingly. More details are available at <a href="http://www.ngicns.scot.nhs.uk/endocrinology/">http://www.ngicns.scot.nhs.uk/endocrinology/</a>

There are other physical aspects of the transition process that have not been discussed here, such as laser hair removal for MTF patients, gamete storage and surgical procedures. However, it is the physical health monitoring associated with hormone therapy that forms the bulk of long-term physical health follow up for transgender patients. There are increasing numbers of transgender patients presenting to services and this coupled with the higher prevalence of mental health issues in this community, will undoubtedly result in mental health professionals coming into contact with this patient group.

Hopefully this short summary will help to better inform readers about the physical health care needs of transgender patients.

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