

Clinical Policy:

# Puberty suppressing hormones (PSH) for children and young people who have gender incongruence / gender dysphoria [1927]

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## Commissioning position

Puberty suppressing hormones (PSH) are not available as a routine commissioning treatment option for treatment of children and young people who have gender incongruence / gender dysphoria.

## Background

Gender incongruence / dysphoria is a condition where a person experiences discomfort or distress that is caused by a discrepancy between a person's gender identity<sup>1</sup> (how they see themselves regarding their gender) and that person's natal sex (and the associated gender role, and/or primary and secondary sex characteristics).

Diagnostic approaches have been described with reference to the Diagnostic and Statistical Manual of Mental Health Disorders Version 5 published in 2013 (gender dysphoria); and the International Statistical Classification of Diseases and Related Health Problems version 11 effective 2022 (gender incongruence).

The reason why some people experience gender incongruence is not fully understood and it is likely that the development of gender identity is multifactorial and influenced by both biological and social factors. Gender variant behaviours may start between ages 3 and 5 years, the same age at which most typically developing children begin showing gendered behaviours and interests (Fast et al, 2018). Gender atypical behaviour is common among young children and may be part of normal development (Young et al, 2019). Children who meet the criteria for gender incongruence / gender dysphoria may or may not continue to experience the conflict between their physical gender and the one with which they identify into adolescence and adulthood (Ristori et al, 2016).

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<sup>1</sup> "Gender" refers to the roles, behaviours, activities, attributes and opportunities that any society considers appropriate for girls and boys, and women and men." [source: WHO website Health Topics: Gender, at <https://www.who.int/health-topics/gender>]

Gender incongruence / gender dysphoria can become more distressing in adolescence due to the pubertal development of secondary sex characteristics and increasing social divisions between genders. Some studies have found that young people with gender incongruence / gender dysphoria may present to gender identity development services with a range of associated difficulties (e.g. bullying, low mood / depression and self-harm and suicidality).

PSH competitively block puberty hormone receptors to prevent the spontaneous release of two puberty inducing hormones, Follicular Stimulating Hormone (FSH) and Luteinising Hormone (LH) from the pituitary gland. This arrests the progress of puberty, delaying the development of secondary sexual characteristics. In England, the puberty suppressor triptorelin (a synthetic decapeptide analogue of a natural puberty hormone, which has marketing authorisations for the treatment of prostate cancer, endometriosis and central precocious puberty) is one of the puberty suppressing hormones used for this purpose. The use of triptorelin for children and adolescents with gender incongruence is off-label.

In January 2020, a Policy Working Group (PWG) was established by NHS England to undertake a review of the published evidence. As part of this process, the National Institute for Health and Care Excellence (NICE) was commissioned to review the published evidence on Gonadotrophin Releasing Hormone Analogues (GnRHa). Nine observational studies were included in the evidence review (NICE 2020). Overall, there was no statistically significant difference in gender dysphoria, mental health, body image and psychosocial functioning in children and adolescents treated with GnRHa (2020). The quality of evidence for all these outcomes was assessed as very low certainty using modified GRADE. There remains limited short-term and long-term safety data for GnRHa. GnRHa may reduce the expected increase in lumbar or femoral bone density during puberty. A re-run of the search was undertaken by NHS England in April 2023 to capture literature published after the NICE evidence review in 2020. Nine further studies were identified.

## **Current treatments**

Treatment of individuals with gender incongruence / gender dysphoria is recommended to be tailored to the specific needs of individual patients and aims to ameliorate the potentially negative impact of gender incongruence on general developmental processes, to support young people and their families in managing the uncertainties inherent in gender identity development and to provide ongoing opportunities for exploration of gender identity (Ristori et al, 2016).

The primary intervention focuses on psychosocial and psychological support; for some individuals, the use of PSH in adolescence to suppress puberty has previously been a treatment option though no NHS clinical commissioning policy has been in place; this may be followed later with gender-affirming hormones of the desired sex (NHS England, 2013). If individuals fulfil additional criteria, they may have various types of gender affirming surgery from the age of 18 years through adult Gender Dysphoria Clinics (NHS England, 2013).

## **What we have decided**

NHS England has carefully considered the evidence review conducted by NICE (2020) and has identified and reviewed any further published evidence available to date.

We have concluded that there is not enough evidence to support the safety or clinical effectiveness of PSH to make the treatment routinely available at this time.

## Links and updates to other policies

NHS England has no other policies relating to the sole use of PSH for the treatment of children and adolescents who have gender incongruence.

This document relates to the specialised service for Children and Young People with Gender Incongruence:

- [Interim Service Specification for specialist gender incongruence services for children and young people](#)

And to the following policy:

- Clinical commissioning policy for prescribing cross sex hormones

This document will be reviewed when information is received which indicates that the policy requires revision. If a review is needed due to a new evidence base then a new Preliminary Policy Proposal needs to be submitted by contacting [england.CET@nhs.net](mailto:england.CET@nhs.net).

## Equality statement

Promoting equality and addressing health inequalities are at the heart of NHS England's values. Throughout the development of the policies and processes cited in this document, we have:

- Given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic (as cited under the Equality Act 2010) and those who do not share it; and
- Given regard to the need to reduce inequalities between patients in access to, and outcomes from healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities.

## Definitions

Gender incongruence	Gender incongruence is where a person experiences discomfort or distress because there is a mismatch between their experienced gender as compared with their assigned sex and its associated physical primary and secondary sex characteristics.
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Puberty suppressing hormones	Synthetic (man-made) hormones that suppress the hormones naturally produced by the body and in doing so, suppress puberty, with the aim of reducing the level of puberty-related anxiety in an individual with gender incongruence.
GRADE	Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) is a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations.

## References

World Health Organisation (2018) International Classification of Diseases 11. Available from <https://icd.who.int/>

Fast, A.A. and Olson, K.R. , Gender Development in Transgender Preschool Children. *Child Dev*, (2018).89: 620-637. doi:10.1111/cdev.1275

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Young, N., Jean, E., Citro, T. (2019). *Acceptance, Understanding and the Moral Imperative of promoting social justice education in the schoolhouse*. Delaware. Vernon Press p.40

National Institute for Health and Care Excellence (2020). Evidence Review: Gonadotrophin Releasing Hormone Analogues for Children and Adolescents with Gender Dysphoria. Available from: [Nice Evidence Reviews – Cass Review](#).