

# Puberty blockers in gender dysphoria: an international perspective

Ludovica Barbi,<sup>1</sup> Gianluca Tornese <sup>2</sup>

Keira Bell, a patient who started to take puberty blockers at the age of 16 years for gender dysphoria (GD), recently won a legal battle against the Tavistock and Portman National Health Service (NHS) Trust Gender-Identity Development Service (GIDS), on the basis that she should have been challenged more before being allowed to start treatment. The High Court ruled that children aged 16 years old and under 16s are unlikely to provide informed consent, and they are not fully capable of understanding the long-term effects of the treatment.<sup>1</sup> As a consequence, NHS England has ordered that children and adolescents under the age of 16 years should not be referred by a GIDS to a paediatric endocrinology clinic for puberty blockers unless a court has ruled that it is in their best interest to receive puberty-blocking treatment.<sup>2</sup> This is a milestone decision considering that puberty blockers have been used in GD for many years in several countries. It is also unclear what this means for patients under 16 years who began treatment before the time of the judgement.

This decision might have an impact on the mental health of young people with GD<sup>3</sup>—both those who are currently receiving puberty blockers and those who might have been eligible in terms of criteria other than age in the future. Despite the relative scarcity of scientific evidence and the need for further research, there is clinical experience and empirical evidence that ‘medical interventions for carefully selected individuals are helpful and potentially lifesaving for transgender youths before the age of 16’,<sup>3, 4</sup> and that youth presenting for medical treatment of GD at early versus late stages of puberty ‘endorsed lower rates of depression, anxiety, and suicidality and higher body esteem and life satisfaction’.<sup>5</sup>

Puberty blockers have been used for GD in adolescents since the late 1990s in the Netherlands, which was the first country to

use them<sup>6</sup> and publish long-term longitudinal cohort follow-up research, showing promising findings regarding effectiveness.<sup>7</sup> The ‘Dutch Protocol’ became a benchmark for evaluating and treating children and adolescents with GD in many countries, including Italy.<sup>8, 9</sup> In 2018, the Italian National Bioethics Committee expressed its substantially favourable position on the use of triptorelin for the treatment of adolescents with GD, and in 2019 the Italian Medicines Agency decided to include triptorelin in the list of medicines paid for by the NHS, authorising its use in the treatment of adolescents with GD.<sup>10</sup> These documents mandate a highly conservative use of the drug, limited to carefully selected cases with several recommendations: the need for the involvement of a multidisciplinary and specialised team (in Italy there are currently eight recognised centres, including ours in Trieste); the use of the treatment only as a last resort when other non-pharmacological interventions have proven to be ineffective; the requirement of informed and unrestrained consent by the parents/guardian; adequate training of paediatricians and health and social services; safety and follow-up studies on the treated cases; and a policy of fair and homogeneous access to the drug. Furthermore, according to the committee, a medical protocol including psychotherapeutic interventions should be available to avoid damaging effects on mental and physical health and minimise the suffering induced by stigmatisation and social discrimination.

Even though puberty blocking in this setting is still highly debated, the possible benefits in well-selected cases are evidence based.<sup>3, 7, 11, 12</sup> Therefore, while the risks of puberty blockers (reduced bone mineralisation, decreased height velocity, menopausal symptoms with suppression of ovarian function and case reports of hypertension) should be always kept in mind, the possible associated risks (major psychiatric suffering and suicide) due to potential delays or debatable denials to treatment related to juridical settings should not be underestimated.

It is essential to highlight that medical diagnoses and treatments are sometimes

subject to mistakes with potential adverse consequences. Adolescents may be able to provide informed consent and demonstrate an understanding and abilities to make decisions regarding hormone therapy initiation.<sup>13</sup> There is international precedent for children and adolescents receiving puberty blockers safely, and by improving the safeguards around puberty blocker provision, the need for individual evaluation through a legal process (which can affect children and families experiencing the costly, lengthy and adversarial nature of courts) could be avoided.<sup>13</sup>

While we understand that GD in children and adolescents is a hot topic with an ongoing debate resulting in different perspectives, we believe that a court is not always the right place to make medical decisions, especially when there is family and medical consensus regarding treatment. The Italian and Dutch models, with multiple specialised and multidisciplinary teams that can guarantee a long-term follow-up and shorten the process, provide a solution with a robust framework for decision-making.

## REFERENCES

- 1 Dyer C. Puberty blockers: children under 16 should not be referred without court order, says NHS England. *BMJ* 2020;371:m4717.
- 2 National Health Service. Gender identity development service for children and adolescent service specification, 2020. Available: <https://www.england.nhs.uk/publication/gender-identity-development-service-for-children-and-adolescent-service-specification/> [Accessed 5 Jul 2021].
- 3 de Vries ALC, Richards C, Tishelman AC, *et al.* Bell v Tavistock and Portman NHS Foundation Trust [2020] EWHC 3274: Weighing current knowledge and uncertainties in decisions about gender-related

<sup>1</sup>Faculty of Health Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands

<sup>2</sup>Institute for Maternal and Child Health IRCCS “Burlo Garofolo”, Trieste, Italy

- treatment for transgender adolescents. *Int J Transgend Health* 2021;22:217–24.
- 4 Turban JL, King D, Carswell JM, *et al.* Pubertal suppression for transgender youth and risk of suicidal ideation. *Pediatrics* 2020;145:e20191725.
  - 5 Chen D, Abrams M, Clark L, *et al.* Psychosocial characteristics of transgender youth seeking Gender-Affirming medical treatment: baseline findings from the trans youth care study. *J Adolesc Health* 2021;68:1104–11.
  - 6 Cohen-Kettenis PT, Delemarre-van de Waal HA, Gooren LJG. The treatment of adolescent transsexuals: changing insights. *J Sex Med* 2008;5:1892–7.
  - 7 de Vries ALC, Steensma TD, Doreleijers TAH, *et al.* Puberty suppression in adolescents with gender identity disorder: a prospective follow-up study. *J Sex Med* 2011;8:2276–83.
  - 8 Dèttore D, Ristori J, Antonelli P. Gender dysphoria in adolescents: the need for a shared assessment protocol and proposal of the AGIR protocol. *J Psychopathol* 2015;21:152–8.
  - 9 Fisher AD, Ristori J, Bandini E, *et al.* Medical treatment in gender dysphoric adolescents endorsed by SIAMS-SIE-SIEDP-ONIG. *J Endocrinol Invest* 2014;37:675–87.
  - 10 Barbi L, Tornese G. Ethical dilemmas of gonadotropin-releasing hormone analogs for the treatment of gender dysphoria. *Minerva Endocrinol* 2021. doi:10.23736/S2724-6507.21.03452-7. [Epub ahead of print: 21 Apr 2021].
  - 11 de Vries ALC, McGuire JK, Steensma TD, *et al.* Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics* 2014;134:696–704.
  - 12 Costa R, Dunsford M, Skagerberg E, *et al.* Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *J Sex Med* 2015;12:2206–14.
  - 13 Clark BA, Virani A. This wasn't a split-second decision": an empirical ethical analysis of transgender youth capacity, rights, and authority to consent to hormone therapy. *J Bioeth Inq* 2021;18:151–64.