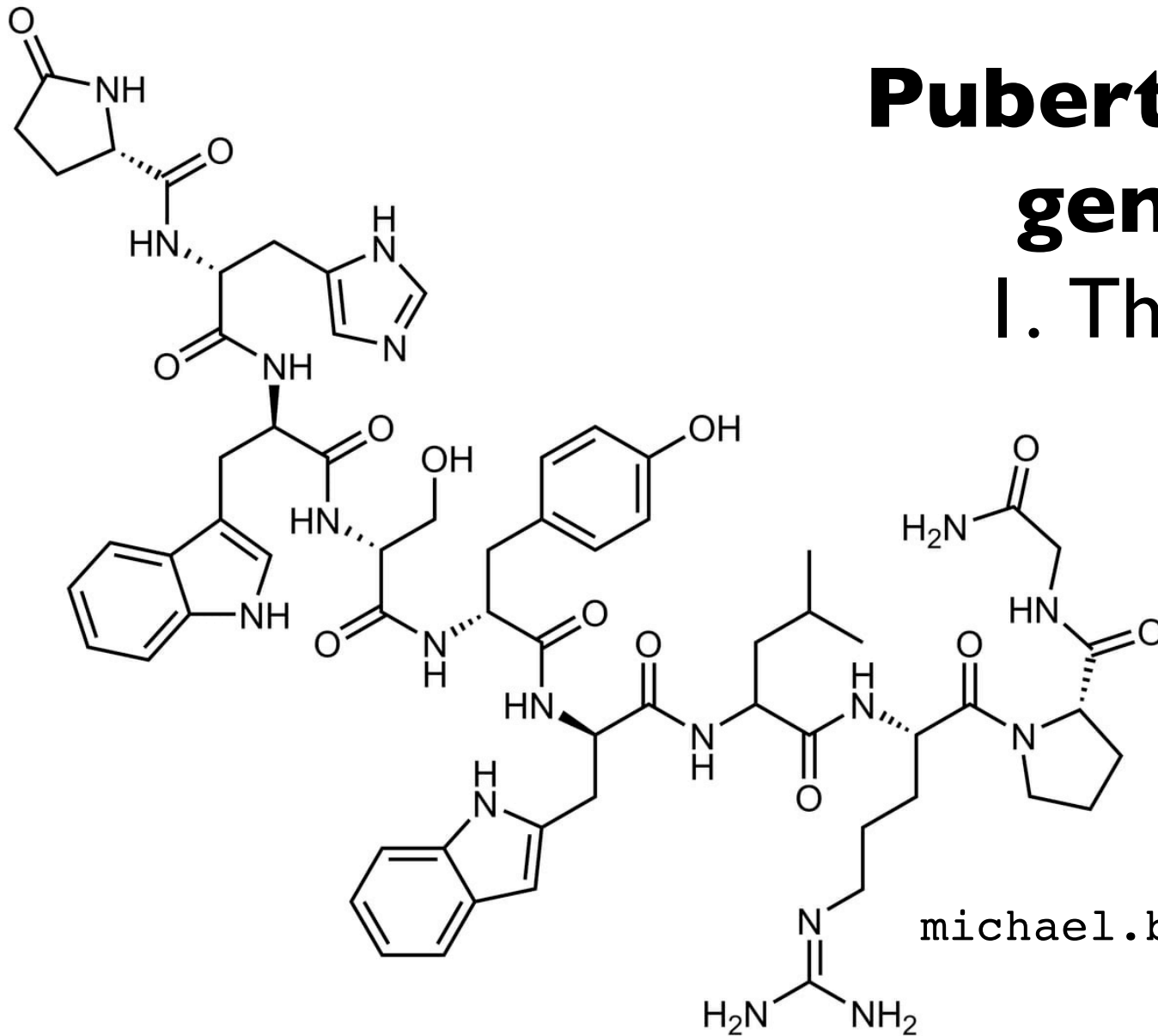


# Puberty blockers for gender dysphoria

## I. The Dutch protocol



December 2020

Michael Biggs

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# Gender Identity Development Service conducts new research

6 April 2011

The [Gender Identity Development Service](#) at the Tavistock and Portman NHS Foundation Trust in association with the [UCL Institute of Child Health](#) is starting a research study looking at the effects of blocking sex hormones in early puberty in a carefully selected group of adolescents with gender dysphoria.

**Michael Biggs**

1 February 2018 at 20:43

Research study looking at the effects of blocking se...

[Details](#)

MB

To: [communications@tavi-port.nhs.uk](mailto:communications@tavi-port.nhs.uk)

---

Hello,

I'd be most grateful if you could provide further information about this project:  
<https://tavistockandportman.nhs.uk/about-us/news/stories/gender-identity-development-service-conducts-new-research/>

Have the results been published yet?

Thanks for your help.





**TransgenderTrend**  
@Transgendertrd

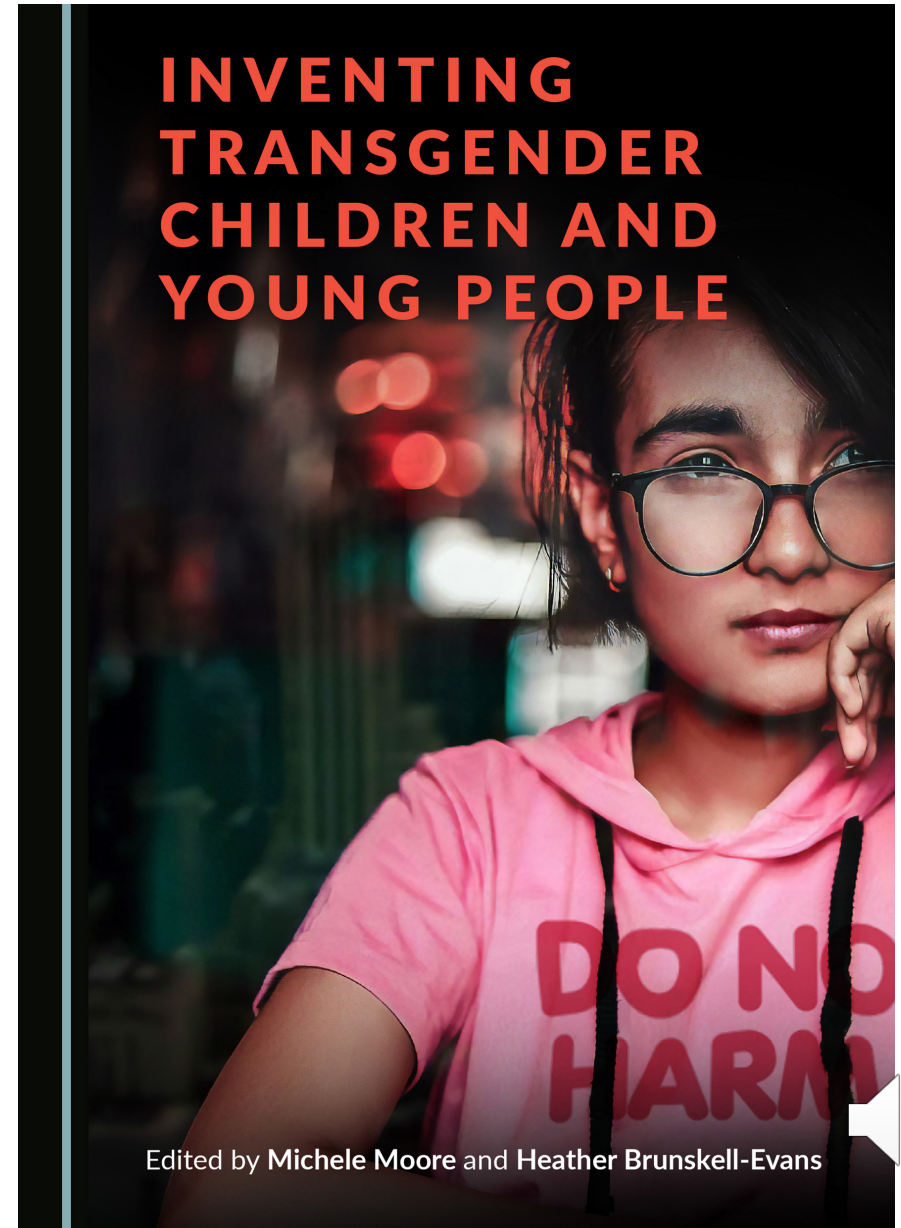
...

The results of the Tavistock experimental trial of puberty blockers have not been published and they are shocking. Yet more than 1,000 adolescents have been given blockers to date. This is crucial and groundbreaking research by Professor Michael Biggs.



Tavistock's Experimentation with Puberty Blockers: Scrutinizing the Evidence ...  
The Tavistock puberty blockers experiment began in 2010. Over 1,000 adolescents have now been treated. Where is the evidence blockers are safe ...  
[transgendertrend.com](https://transgendertrend.com)

10:42 pm · 5 Mar 2019 · Twitter Web Client



News

# NHS transgender clinic accused of covering up negative impacts of puberty blockers on children by Oxford professor



The Tavistock ccentre is an NHS specialised clinic for transgender children in Lon BLACKLER/REX SHUTTERSCOCK

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By Camilla Tominey, ASSOCIATE EDITOR and Joa

7 MARCH 2019 • 9:30PM



BBC is a British public broadcast service. Wikipedia

## Transgender treatment: Puberty blockers study under investigation - BBC Newsnight

19,856 views • Jul 22, 2019

315 188

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# Keira Bell: 'I couldn't sit by while so many others made the same mistake'

Her court action has led to a ruling which will make it harder for children to get puberty-blocking drugs



**IN THE HIGH COURT OF JUSTICE**  
**ADMINISTRATIVE COURT**  
**DIVISIONAL COURT**

Before :

**THE PRESIDENT OF THE QUEEN'S BENCH**  
**LORD JUSTICE LEWIS**  
**MRS JUSTICE LIEVEN**

-----  
Between :

(1) QUINCY BELL  
(2) MRS A

and

THE TAVISTOCK AND PORTMAN NHS

NATIONAL HEALTH SERVICE COMMISSIONER  
(ENGLAND)

(1) UNIVERSITY COLLEGE LONDON  
FOUNDATION TRUST  
(2) LEEDS TEACHING HOSPITAL  
(3) TRANSGENDER TRUST

# ‘Puberty blockers’

- Gonadotropin-Releasing Hormone agonist (GnRHa)  
= Luteinizing Hormone-Releasing Hormone (LHRH) agonist
- UK and Netherlands: triptorelin; USA: leuprorelin (branded Lupron)
- Licensed for
  - precocious puberty in children (girls < 7, boys < 9)
  - endometriosis and uterine fibroids in women (< 6 months)
  - prostate cancer in men
  - ‘severe sexual deviation’ in men

Treatment of Paraphilic Disorders in Sexual Offenders or Men With a Risk of Sexual Offending With Luteinizing Hormone-Releasing Hormone Agonists: An Updated Systematic Review

Daniel Turner, PhD, MD,<sup>1,2</sup> and Peer Briken, MD, FECSM<sup>1</sup>

(2018)

**Clinical Implications:** Although LHRH agonists seem to be the most effective drugs in the treatment of paraphilic fantasies and behaviors, they should be reserved for patients with a paraphilic disorder and the highest risk of sexual offending because of their extensive side effects.

The Feasibility of Endocrine Interventions  
in Juvenile Transsexuals

(1996)

Louis Gooren, PhD  
Henriette Delemarre-van de Waal, PhD



Professor Louis Gooren  
Endocrinologist

Professor of Transsexology,  
Free University of  
Amsterdam

*(The Wrong Body,*  
Channel 4, 1996)



P.T. Cohen-Kettenis  
S.H.M. van Goozen

# Pubertal delay as an aid in diagnosis and treatment of a **transsexual adolescent**



University of Utrecht

*(The Wrong Body,*  
Channel 4, 1996)





B came to the gender clinic requesting sex reassignment surgery at age 16. From interviews with her parents it appeared that she had always been a classical tomboy in her play activities and toy and peer preference and that she wished to be a boy from early on. Also, she showed boisterous and antagonistic behavior and was often in conflict with her father. At school she did well. At seven she had psychotherapy for a year, because of her oppositional and disobedient behavior, but without any success. When she was 12 her mother found a suicidal note, telling that she did not want to live any longer if she would enter puberty. Again she was treated by means of psychotherapy at the local mental health institute. Despite some improvement in her depressed mood her cross-sex behavior, interests, and identification remained. Her psychiatrist and a pediatric endocrinologist decided therefore to delay B's puberty by triptorelin treatment. By then she was 13 years old. Using this hormone she started to feel better about herself, thus, allowing her therapist to explore gender issues for an extended period, without being pressured by any physical developments.

## Aged 18–20

- testosterone
- mastectomy
- ovariectomy/uterus removal
- birth certificate changed
- metoidioplasty

In a follow-up interview one year after the ovariectomy and mastectomy, B reported no gender dysphoria at all. He said that he had found the adjustment to the male role to be very easy and expressed no doubts on the adequacy of his masculine behavior. He never felt any regrets about his decision and had never contemplated to live as a girl again. Knowing now what sex reassignment implied, he would do it all over again. B was happy with his life and did not feel lonely. He was currently studying to become a physician.

(Cohen-Kettenis & van Goozen 1998)



# Motivation

Published: 02 November 1995

## **A sex difference in the human brain and its relation to transsexuality**

Jiang-Ning Zhou, Michel A. Hofman, Louis J. G. Gooren & Dick F. Swaab

*Nature* **378**, 68–70(1995) | [Cite this article](#)

## Sex Reassignment of Adolescent Transsexuals: A Follow-up Study (1997)

PEGGY T. COHEN-KETTENIS, PH.D., AND STEPHANIE H.M. VAN GOOZEN, PH.D.



# Dutch Protocol

- 12: puberty blockers
  - Tanner Stage 2
- 16: cross-sex hormones
- 18: surgery

## Eligibility criteria

- gender dysphoria from childhood; worsens at puberty
- psychological stability
- support from family

## Acknowledgements

The authors are very grateful to **Ferring Pharmaceuticals for the financial support** of studies on the treatment of adolescents with gender identity disorders.

European Journal of Endocrinology (2006) 155 S131–S137

ISSN 0804-4643

## **Clinical management of gender identity disorder in adolescents: a protocol on psychological and paediatric endocrinology aspects**

Henriette A Delemarre-van de Waal and Peggy T Cohen-Kettenis

*Amsterdam Gender Clinic, Departments of Pediatrics and Medical Psychology, Institute for Clinical and Experimental Neuroscience, VU University Medical Center, PO Box 7057, 1007 MB Amsterdam, The Netherlands*



# Homosexuality?

children and adolescents seek professional advice for these gender atypical children. Not all children with gender atypicality will turn out to be transsexuals later in life. Several prospective studies of gender atypical boys show that this childhood behavior correlates considerably stronger with future homosexuality than with transsexualism (Green 1987; Money & Russo 1979; Zuger 1984).

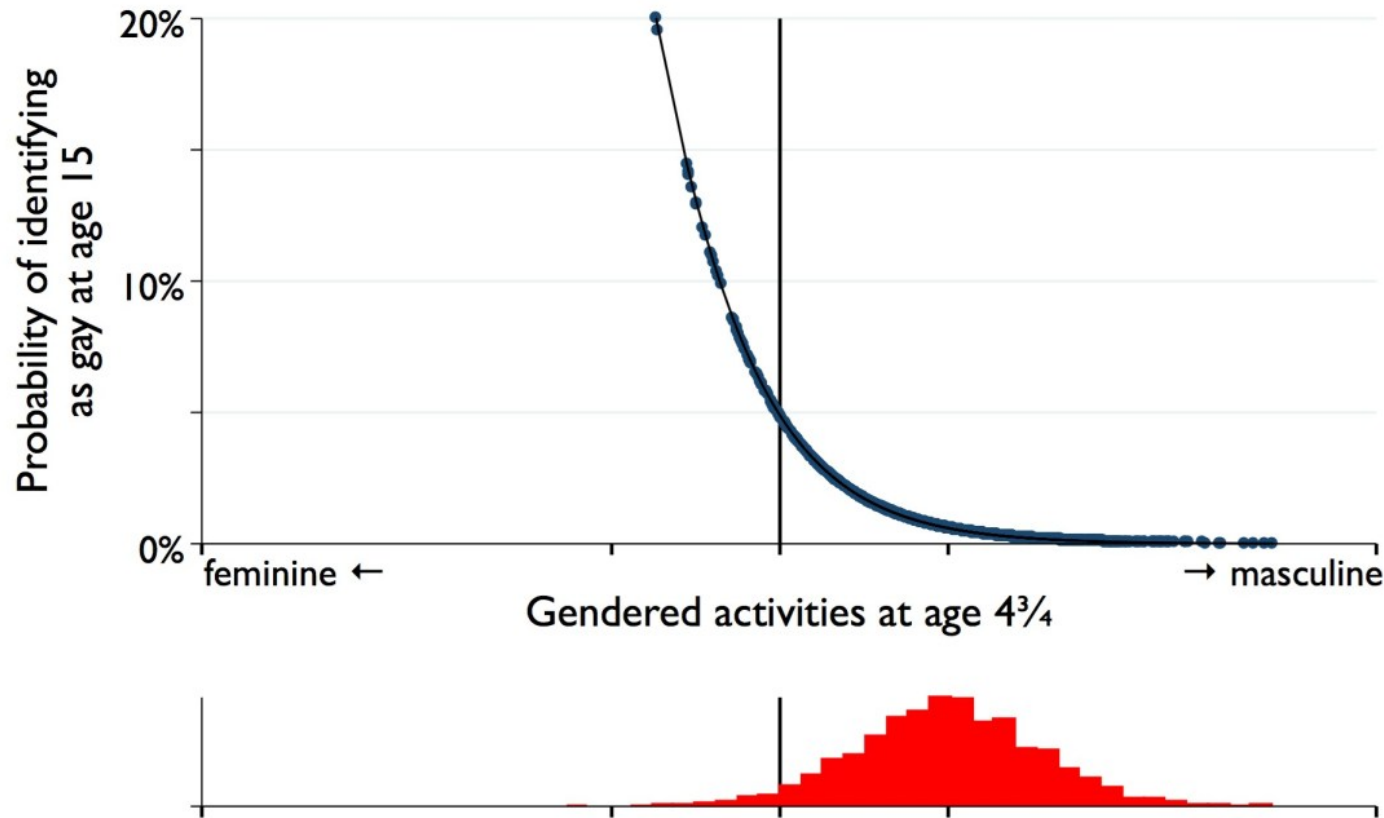
Now that juvenile persons with gender problems come more frequently to the attention of the psychomedical care system, some of the youngsters will turn out to be genuinely transsexual in their mid-teen years; that is, there is no reasonable expectation that their cross-sexed gender identity will evermore change (Cohen-Kettenis 1994, 1995). The interests of such adolescents could be served with an early start of (cross-sex) hormone treatment to spare them the

(Gooren & Delemarre-van de Waal 1996)

(Cohen-Kettenis & Gooren 1999)

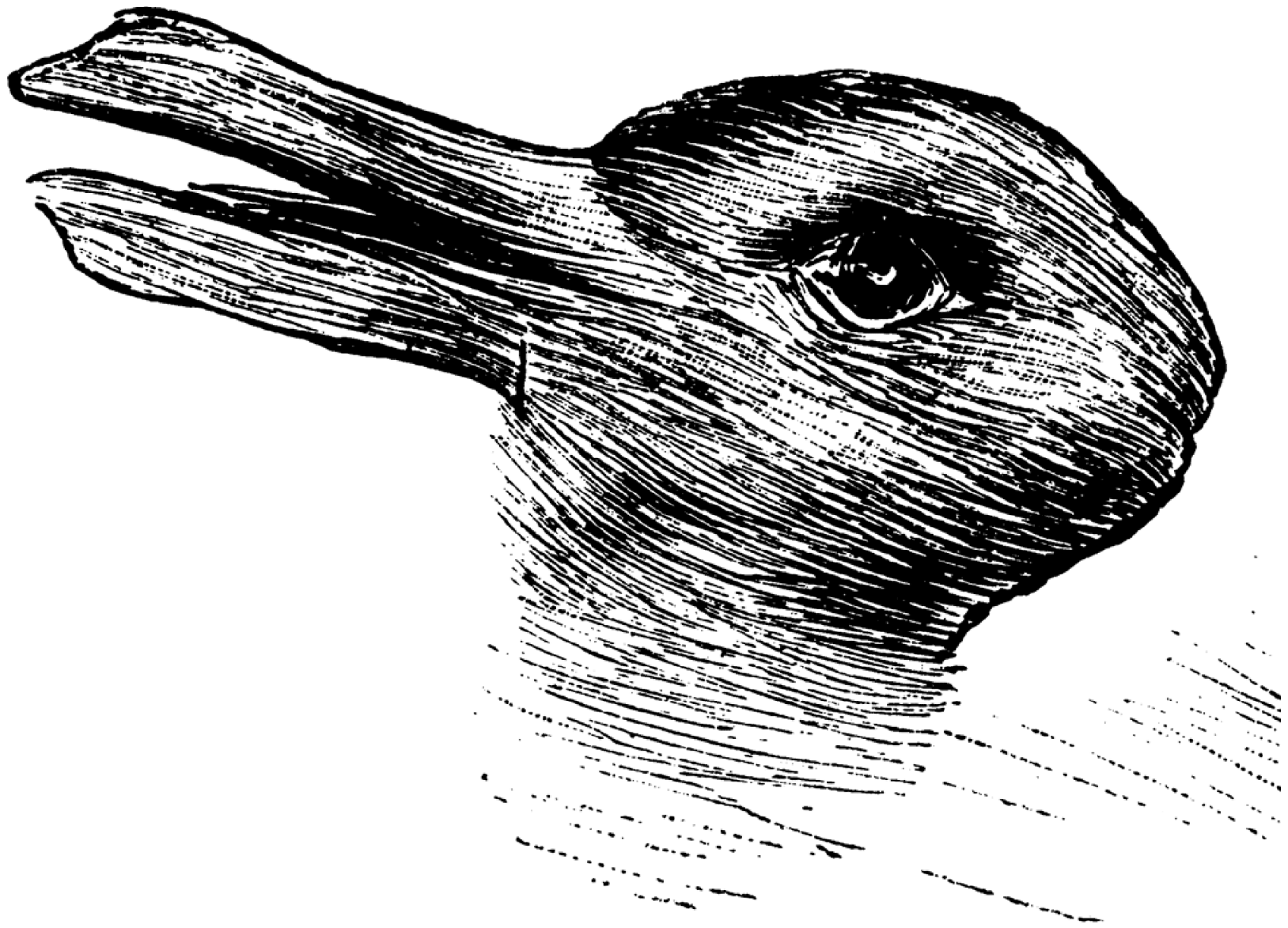
Not all children with GID will turn out to be transsexuals after puberty. Prospective studies of GID boys [25, 28, 76, 77] show that this phenomenon is more closely related to later homosexuality than to later transsexualism. These findings are in accordance with retrospective studies, which have shown that male and female homosexuals recall more cross-gender behavior in childhood than male and female heterosexuals [78–80].

### 3. Boys who preferred 'feminine' activities were far more likely to become gay



Data from Li, Kung, & Hines 2017

<https://4thwavenow.com/2018/08/07/research-evidence-gender-atypical-tots-likely-to-become-gay-or-lesbian-not-trans/>



## Reversible?

The effects of LHRH analogues are fully reversible; in other words, no lasting undesired effects are to be expected. Upon discontinuation of the LHRH analogues, the hormonal activity of the own puberty is resumed within three months. Side effects are few, particularly when there is usage only for a limited period of 3-18 months, as will be the case in adolescent gender dysphoric persons. In their

(Gooren & Delemarre-van de Waal 1996)

During puberty, developmental processes also take place in the brain. In the adult brain, a number of sex differences have been reported. For example, the amount of grey matter is higher in adult females than males in the gyrus cingulatus, the median frontal area and the lobus paracentralis in particular (16). It is not clear yet how pubertal suppression will influence brain development. From our experience with adolescents, who have been taking GnRHa and are now adults, no gross effects on their functioning are detectable.

(Delemarre-van de Waal & Cohen-Kettenis 2006)

## Diagnostic?

The suppression of puberty using GnRHa is a reversible phase of treatment. This treatment is a very helpful diagnostic aid, as it allows the psychologist and the patient to discuss problems that possibly underlie the cross-gender identity or clarify potential gender confusion under less time pressure. It can be considered as 'buying time' to allow for an open exploration of the SR wish (8).

(Delemarre-van de Waal & Cohen-Kettenis 2006)

interventions, they would decide that SR is not what they need. However, until now, none of the patients who were selected for pubertal suppression has decided to stop taking GnRHa. On the contrary, they are usually very satisfied with the fact that the secondary sex characteristics of their biological sex did not develop further.





# Genital surgery

## The Treatment of Adolescent Transsexuals: Changing Insights

(2008)

Peggy T. Cohen-Kettenis, PhD,<sup>\*§</sup> Henriette A. Delemarre-van de Waal, MD, PhD,<sup>†§</sup> and Louis J. G. Gooren, MD, PhD<sup>‡§</sup>

<sup>\*</sup>Department of Medical Psychology, VU University Medical Center, Amsterdam, The Netherlands; <sup>†</sup>Department of Pediatric Endocrinology, VU University Medical Center, Amsterdam, The Netherlands; <sup>‡</sup>Department of Endocrinology, VU University Medical Center, Amsterdam, The Netherlands; <sup>§</sup>Institute for Clinical and Experimental Neurosciences, VU University Medical Center, Amsterdam, The Netherlands

Finally, for the MtFs a non-normal pubertal phallic growth, the genital tissue available for vaginoplasty may be less than optimal. However, appropriate adjusted techniques exist to deal with the shortage of tissue [35].



## 7. “B” at 35

CLINICAL CASE REPORT SERIES

(2011)

### **Puberty Suppression in a Gender-Dysphoric Adolescent: A 22-Year Follow-Up**

**Peggy T. Cohen-Kettenis · Sebastiaan E. E. Schagen ·  
Thomas D. Steensma · Annelou L. C. de Vries ·  
Henriette A. Delemarre-van de Waal**

of a negative impact on brain development. He was physically in good health, and metabolic and endocrine parameters were within reference ranges. Bone mineral density was within the normal range for both sexes. His final height was short as compared to Dutch males; however, his body proportions were within normal range. This first report on long-term effects of puberty suppression suggests that **negative side effects are limited** and that it can be a useful additional tool in the diagnosis and treatment of gender dysphoric adolescents.



having a phalloplasty. Despite his good looks and very masculine appearance, he had not had many steady girlfriends, which may have resulted from the guardedness he already had as an adolescent. At age 29, he had a serious relationship with a woman, which lasted for 5 years. However, he chose not to live together when the opportunity to do so arose. After his choice to continue living apart, his girlfriend ended the relationship, a few months before his interview at the clinic. This made him very much regret his lack of commitment. B considered it likely that his need to distance himself from her had been related to his shame about his genital appearance and his feelings of inadequacy in sexual matters. Additional factors, such as serious illness of his father and a suicide among his sisters' in-laws, made him rather sad at the time of the interview. Although his psychoneuroticism score on the Symptom Checklist-90 (Arrindell & Ettema, 2003) was in the normal range, his depression subscore was high, indicating depressed feelings. However, on the Beck Depression Inventory, he scored in the "minimal range" (van der Does, 2002), indicating that he did not fulfill criteria for clinical depression. On the Adult Self-Report, assessing

(Cohen-Kettenis  
et al. 2011)



## Concluding questions

1. Diagnosing or creating transsexuals?
  - ‘juvenile transexuals’, ‘transsexual adolescent’
  - almost all adolescents given puberty blockers will progress to cross-sex hormones and surgery
2. How do we know whether some of these “transsexuals” could not have grown into gay, lesbian, or bisexual adults? or quirky heterosexual adults?
3. Why no randomized control trial; why no experiment on animals?
4. How to balance appearance with sexuality and fertility?



‘But we are very, very reserved about this treatment. Hormonally speaking it’s safe. But psychologically speaking, did we do the right thing? Do people of 13 never have second thoughts of what they are doing?’

*(The Wrong Body,*  
Channel 4, 1996)



## **Acknowledgements**

My research would not have been possible without the support of Sherena Kranat, and the expertise of Stephanie Davies-Arai, Elin Lewis, Susan Matthews, and the Society for Evidence-Based Gender Medicine.

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