# Sex-identity review shows nurture no match for nature

## Boy-happy-as-girl report is debunked

By NATALIE ANGIER
The New York Times

A classic case of a gruesome surgical accident and its consequences, long used as evidence of the pliability of sexual identity, turns out to suggest the opposite: that a sense of being male or female is innate, immune to the interventions of doctors, therapists and parents.

In 1973, researchers published an account of an infant boy whose penis had been accidentally cut off and who was subsequently reared as a girl. The child appeared to be happy with life as a female.

Reported by Dr. John Money, a sexologist at Johns Hopkins University in Baltimore, the case entered the textbooks as proof that infants are more or less sexually neutral at birth, establishing sexual identification only with socialization and exposure to the binary world of boys and girls, blue and pink, guns and Barbies.

Now, Dr. Milton Diamond of the University of Hawaii-Manoa in Honolulu and Dr. H. Keith Sigmundson of the Ministry of Health in Victoria, British Columbia, have presented an in-depth follow-up that refutes the initial reports. They say that the boy, far from being satisfied with his reassignment to girlhood, renounced his female identity at age 14 and chose to live as a man, even undergoing extensive surgery to attempt a reconstruction of his ablated genitals.

"It's a fascinating case in the history of gender theory," said Dr. Dean Hamer of the National Cancer Institute, who has studied genes that may influence male sexual orientation. "It offered one of the strongest arguments for the extreme view that adult gender identity was purely a product of upbringing, and now that's gone."

Now, Hamer said, "most researchers, including John Money, generally agree that gender identity is partly innate and partly cultural."

**THE PATIENT,** variously referred to as Joan or John, is now in his 30s, married, and is as well-adjusted as can be expected of one who has been through such an ordeal, Diamond and Sigmundson report in the current issue of The Archives of Pediatric and Adolescent Medicine.

After finding out her past, Joan became John, requested male hormone shots, had a mastectomy and began phalloplasty to try rebuilding his male genitals with skin grafts.

Diamond and Sigmundson say they seek not only to set the record straight but to argue that the case underscores the importance of prenatal events like hormone exposure in building a sexual self.

"Despite everyone telling him constantly that he was a girl," said Dr. William Reiner of Johns Hopkins Hospital, "and despite his being treated with female hormones, his brain knew he was a male. It refused to take on what it was being told."

**YET THE DEBATE** remains as to how much sexual identity is instilled by nature and how much by nurture, experts said, and the current paper does not settle that issue.

Moreover, few agree on what it means to talk about "maleness" or "femaleness" to begin with.

"I don't see this tragic story as a way of helping us to define gender identity, or what it means to be a boy or a girl in our culture," said Dr. Barbara Mackoff, a psychologist who studies gender issues and is the author of the book "Growing a Girl."

**DIAMOND AND** Sigmundson use the case study to call for changes in the treatment of babies born with ambiguous genitalia, a condition found in about 1 in every 1,000 births, which results from a variety of chromosomal and hormonal abnormalities. As it is now, the majority of such infants are designated female, largely because it is considered surgically easier to turn ambiguous genitals into a vagina than into a penis.

# Group has new policy on prostate cancer tests

## Routine screening for all men not needed, doctors say

By CURT SUPLEE
The Washington Post

The American College of Physi-

cians, in a break with what has become a widespread practice, has concluded that there is no evidence that patients benefit from routine screening for prostate cancer and recommends against regular testing for all men.

"Screening for prostate cancer is not for everyone," said Harold Sox Jr., the group's president-elect.

Because of uncertainties in the reliability of the tests, and the substantial risks of aggressive early treatment, the organization decided screening should be undertaken on an individual basis following patients' counseling by physicians.

**THE NEW** guidelines, published in yesterday's issue of the Annals of Internal Medicine, are at odds with recommendations of several other groups.

The American Cancer Society, the American College of Radiology and the American Urological Association recommend that men begin undergoing annual digital rectal exams at age 40. The cancer society also recommends annual prostate-specific antigen tests beginning at age 50.

But the American College of Physicians, an organization of 100,000 internal medicine specialists, now advises that "rather than screening all men for prostate cancer as a matter of routine, physicians should describe the potential benefits and known harms of screening, diagnosis and treatment, listen to the patient's concerns and then individualize the decision to screen."

**THE DIFFERENCES** between the two sets of guidelines — analogous to the nationwide dispute over the best age for women to begin having regular mammograms — reflect the trade-offs and uncertainties inherent in diagnosing and treating the highly variable disease, which strikes about one in five American men and will kill an estimated 41,800 this year.

Increased prostate-specific antigen screening, which became widely available in the late 1980s, reportedly has led to a sixfold increase in surgical removals of the prostate, a gland that lies below the bladder and encircles the urethra.

In many cases, both patients and physicians have wondered whether the risks of early aggressive treatment — including impotence, urinary incontinence, bowel problems and even death — may outweigh the threat of prostate cancer, which often develops so slowly that sufferers die of some other cause before the cancer becomes a severe problem.

**COMPOUNDING THE** quandary, said Herbert Waxman, senior vice president of the American Cancer Society, is the frustrating absence of conclusive evidence that early detection improves a patient's outcome. "It's not like screening for high blood pressure, where the benefits are absolutely compelling," he said.

An exhaustive study of published research, he said, led to "the conclusion that there was no evidence that a screened population had an advantage in survival or degree of illness" compared with unscreened patients.

Moreover, Waxman noted, neither

But the scientists propose that many of these constructed females may be unhappy with their enforced identity, particularly if they have a Y chromosome — the most overt mark of a male — and were likely to have been exposed to male hormones in the womb. In these infants, the scientists write, "the psychosexual bias" from prenatal events may turn them in a masculine direction, and they would be better off reared as boys.

Debate over the medical treatment of ambiguous genitalia in infants has grown fierce, as an increasingly vocal group of intersexuals protest that many of the surgical techniques used in an attempt to correct anomalous genitals can be mutilating and harmful in the long term.

"Diamond's recommendations aren't going to help this problem," said Cheryl Chase, founder of the San Francisco-based Intersex Society of North America. "Instead, clinicians who treat intersex children will start assigning more of them as males, and doing a different sort of horrible intervention," for example, by trying to construct a phallus from a small amount of tissue.

**WHATEVER ITS** wider impact, the case of Joan/John has the force of allegory. The patient, born a normal male with a twin brother, had his penis accidentally cut off at 8 months by a surgeon attempting to repair a fused foreskin. Convinced that it would be impossible for a boy to adjust to the loss, the doctors recommended that the parents rear him as a girl and keep his past a secret.

The infant's testicles were removed and a preliminary attempt to fashion a vagina was made. The parents did their best to regard their child as a daughter, choosing feminine clothes, toys and activities. Joan was also put in the care of female psychiatrists.

As the current report relates the case, through recollections of the parents and of the adult John, the new identity never took. Joan would tear off her dresses, reject dolls and seek out male friends. Her mother would try to get Joan to imitate her makeup ritual; instead, she mimicked her father shaving. She often tried to urinate standing up, despite the mechanical difficulties.

Her classmates teased her mercilessly, saying she looked like a boy, calling her "cave man" and "gorilla," and they refused to play with her. She spent a lot of time having her genitals scrutinized by doctors and not understanding why.

**AT THE AGE** of 12, Joan began receiving estrogen treatment and grew breasts. But she disliked the hormone's feminizing effects and stopped taking it. She was not attracted to boys. She had no friends and considered suicide. At 14, still unaware of her past, she refused to continue living as a girl or to have any more vaginal surgery.

Finally confronted, her father broke down in tears and told her the truth. Rather than being devastated, Joan was relieved. "For the first time everything made sense," the article quotes her as saying, "and I understood who and what I was."