

## **Unclear gender: Let children determine own**

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**WASHINGTON (AP) -- It's the first question new parents hear: girl or boy? But hundreds of babies are born each year where the gender isn't clear. Prompt surgery to assign one was once the norm.**

But gender depends on more than anatomy or hormones. It also seems to stem from the very earliest brain development, researchers said Friday in urging doctors to hold off on the knife until children can determine their own sex.

"To discover who or what a child is ... you have to ask them," Dr. William Reiner of the Oklahoma University Health Science Center told a meeting of the American Association for the Advancement of Science.

"There is no one biological parameter that clearly defines sex," added Dr. Eric Vilain of the University of California, Los Angeles, whose research suggests gender is genetically hard-wired into the brain before birth -- regardless of which genitalia develop.

The issue is "intersex," the name for numerous conditions that result in roughly one in 4,000 babies born with both male and female traits.

One of the more common is congenital adrenal hyperplasia. In such cases, genetic girls with XX chromosomes are exposed in the womb to such high levels of androgen -- the hormone that triggers male development -- that they appear male externally even if they have female reproductive organs. A different condition leaves genetic males less responsive to androgen during development, so they're born without a penis.

The parents must pick a gender somehow, to know what to call their child and because gender is required on a birth certificate. So specialists check non-obvious factors such as which sex chromosomes the child has and levels of sex hormones in the blood.

But Vilain's research suggests there are factors at work that can't be measured. The scientific dogma used to be that hormones alone could "masculinize" the brain, he said. But he identified 54 genes that work differently in the brains of male and female mouse embryos just 10 days after conception -- before sex hormones are ever produced.

Doctors also once thought that how people were raised and their genitalia were enough to determine gender, said Reiner, who as a urologist performed sex-assignment surgeries on babies.

But Reiner began seeing children who had been assigned to one sex as babies and a few years later began identifying themselves as the other. He re-trained as a psychiatrist to study these children.

His latest review of 94 intersex children found over half of the genetic males "transitioned" to become boys despite being raised as girls and undergoing female surgical sex assignment.

How? As early as age 4 1/2, the children would suddenly say, "I'm a boy," or pick a boy's name, Reiner said.

Hence his advice to parents to think hard before agreeing to surgery for an intersex baby: Dealing with the social trauma of switching gender later is enough without the issue of surgery that can't be reversed.

Aside from the emotional trauma of such a switch are legal issues.

Virginia Harmon of Chevy Chase, Md., was born with Klinefelter Syndrome, where instead of the X and Y chromosome of males, people have an extra X chromosome. She was raised as a boy, but at age 14 began developing breasts and "began negotiating with my parents" to transition to a girl. At 25, she had female sex-assignment surgery.

But law in Texas, where she was born, doesn't allow her to change her birth certificate, which still states that she is male \_ so she couldn't marry a man there.

Indeed, most U.S. law assumes that everyone is clearly male or female, putting up hurdles for everything from name changes to marriage for intersex patients assigned the wrong gender, said law professor Susan Becker of Cleveland State University.

So what should parents do? Get as much information as possible on the child's physical and genetic condition, Reiner advises. He puts parents in touch with the Intersex Society of North America to hear personal stories.

And more doctors are putting off sex-assignment surgery, he said. A recent survey of pediatric urologists found two-thirds would call genetically male babies boys even if they have no penis \_ while five years ago almost all would have recommended raising them as girls.

"Then if at age 12 they say, 'No, I'm a girl,' at least you haven't damaged anything," he said.