GENDER

When boys would rather not be boys

Kids are being diagnosed—and identifying themselves—as transgendered younger than ever before. But should they receive the same body-altering treatments adults do?

CORMAC O'DWYER ENTERED Grade 8 in Vancouver as a girl named Amber. All traces of femininity stopped with the name; Amber looked, dressed and acted like a boy. "It was awkward," admits Cormac, sleeves rolled up to reveal downy, muscular arms, elbows resting on the kitchen table in the family's immaculate home in upscale Kitsilano. From the other end of the table, Cormac's mother, Julia, pipes up. "People would use the male pronoun," she recalls. Usually Julia felt obliged to correct the error, leaving new acquaintances flustered and confused.

But solecisms were the least of Cormac's worries during the transition from female to male. Becoming a boy involved wearing a breast-flattening binder, changing for phys. ed. in the teachers' change room, declining invitations to go swimming, and carrying a cellphone to call for help in case of bullying. And then there was the therapy: testosterone injections, counselling and surgery that removed his breasts and contoured what remained into the flat, square planes of a male chest.

Now 16, Cormac is one of a growing number of teenagers in Canada who have been diagnosed with gender identity dysphoria (GID), or transgenderism. These kids feel that they have been born into the wrong bodies, and are actually members of the opposite sex. Cormac recalls his epiphanic moment following a presentation by a peer-counselling group for lesbian, gay, bisexual and transgender youth at Lord Byng Secondary School. "I always sort of knew I wanted to be a guy," says Cormac. "They explained to me what transgender was and, for the first time ever, I 'got it' and went home and told my mom."

Julia, too, clearly remembers that day, and how difficult it was to reconcile her eldest child's dramatic declaration. "You don't know how to answer," she says. "That's the one thing for someone who isn't transgender—it's very hard to understand what is inside a person to need to make that change."

Treatment of GID is highly controversial. Some experts believe that the best way to help children and teens is to convince them to accept their bodies and not undergo the therapies that will cause dramatic physical changes. Cormac, however, lives in Vancouver, where pediatric endocrinologist Dr. Daniel Metzger and the B.C. Transgender Care Group are based. The loosely organized group, of which Metzger is a member, is the sole provider of care for transgender youth in B.C. and offers the most extensive suite of medical services for GID adolescents in Canada. Metzger believes that the best course of treatment for teenagers diagnosed with GID is hormone therapy: either blockers to stop

Happy in his skin: *Cormac O'Dwyer, 16, once known as a girl named Amber, says that post-transition he finally feels whole*

puberty or, if post-pubescent, hormones that physically alter the body in a way that reflects their chosen gender. For some teens like Cormac, who are confident, psychologically stable and have family support, this transformation can be complemented further with cosmetic surgery.

Without treatment, Metzger argues, the path to adulthood for GID teens can be torturous, as evidenced by shockingly high attempted suicide rates: 45 per cent for those aged 18-44, in comparison to the national average of 1.6 per cent, according to the U.S. 2010 National Transgender Discrimination Survey Report on Health and Health Care. Cormac carefully considers what life would be like today if he were still Amber. He pauses for a few seconds then gravely announces, "I think that would push me to be suicidal." He is much more calm now, he says, free from his obsession with wanting to be a boy. "Before I transitioned I thought about it a lot, like, every minute. Now, I feel like I have so much extra brain space," says Cormac, who is an honour roll student.

The sense of calm also comes, he adds, from the unburdening of secrets. He is a young man both in body and spirit, rather than a girl trying to pass as a boy. "I have friends that I've had for a year or more and I don't know if they know or not about the transition. It's not important to where I am right now. I guess I could tell them but I don't even think about it."

Transgender experts like Harvard Medical School professor and endocrinologist Dr. Norman Spack, co-director of Boston Children's Hospital's clinic for disorders of sexual differentiation, speaks highly of the B.C. Transgender Care Group. In fact, Spack deems the B.C. program one of the more progressive in the world. While progressive, the B.C. Transgender Care Group is not radical. The group's psychology or psychiatry transgender specialists will ensure that an adolescent who is diagnosed with GID is mentally healthy before referring them to Metzger for hormonal therapy. If a child has GID in combination with depression or anorexia—which can occur in youngsters trying to cope with the stress of GID—then the hormonal cocktail that transforms their sexual development is delayed. For Cormac, who had already finished puberty, a regimen of testosterone injections stopped his period and thickened his jawline. He began shaving and started to speak in the lower registers. During the transition, Cormac also consulted with Vancouver plastic surgeon Dr. Cameron Bowman—one of only three sex-reassignment surgeons in Canada—about getting a mastectomy. After a panel of psychiatric transgender specialists assessed and approved Cormac's readiness, he had the operation a week after his 15th birthday, making him one of the youngest transgenders in Canada ever to undergo a provincially funded mastectomy and chest contouring. Pronoun confusion was, at last, a moot point.

Modern family: *The O'Dwyers support Cormac, but some families strongly resist gender change*

Hormonal therapy advocates point to the high suicide rate of kids who feel trapped in the wrong bodies

SOME SPECIALISTS question whether such a metamorphosis is appropriate for young patients. Psychologist Kenneth Zucker, who heads Toronto's Gender Identity Service in the Child, Youth, and Family Program at the Centre for Addiction and Mental Health, leans toward counselling to get his patients—especially the younger ones—to accept their birth sex. He worries that the Internet, which has opened up a world of information for children and teens confused about sexual orientation, may be making "transgenderism fashionable: it's kind of cool to be transgender, as opposed to being gay or lesbian," says Zucker, who sees at least 50 new GID cases a year, a "quadrupling compared to 30 years ago." To illustrate his point, Zucker describes one 15-year-old female patient as a "tomboy" who is attracted to other girls—but interprets the attraction as transgenderism. Such "internalized homophobia" can emerge in homes or cultures that oppose homosexuality, Zucker says. The teen thinks, "It would be easier if I were a boy attracted to girls, because then I wouldn't be teased for being a lesbian."

Zucker also cautions that psychological disorders like Asperger syndrome, a form of autism characterized by repetitive patterns of behaviour and interests, can also spark GID. Kids with Asperger's "can get obsessed with a particular idea, and gender is one."

Unsurprisingly, given all this, Zucker does not approve sex-reassignment surgery for his adolescent patients at all. And he prefers they wait until they're at least 13 to take puberty blockers—which are reversible—and especially estrogen or testosterone hormone therapy, the effects of which are not reversible.

Harvard's Spack is well acquainted with Zucker's contributions to the study and treatment of GID in children and adolescents. The transgender medical fraternity worldwide, Spack adds, generally supports Zucker's data showing that about 80 per cent of prepubescent children who identify as the opposite gender will change their minds, while 20 per cent will persist. However, Spack disagrees with Zucker's counselling methods, which reflect the Toronto psychologist's fundamental assumption that encouraging a child to play and dress in a way that reflects their biological sex may help them to grow out of their GID. Children who undergo this type of psychological therapy can be devastated by it, Spack believes.

WHAT IS THE root cause of GID? Clinicians and researchers worldwide are mystified, according to Peggy Cohen-Kettenis, a professor of medical psychology at Free University Medical Center in Amsterdam. Considered one of the world's foremost experts on transgender adolescents, Cohen-Kettenis believes genetics likely play a strong role; abnormal levels of sex hormones in utero during fetal development may also play a part. Or, brain receptors may be unusually sensitive to developmental hormones, says Cohen-Kettenis. She also points to recent magnetic resonance imaging (MRI) research, which indicates that the brains of those with GID have striking similarities to the brains of the opposite sex with which they identify. For example, according to a study published last year in the *Journal of Psychiatric Research*, specific regions of female-to-male transsexuals' brains strongly resemble male brains.

But neither Metzger nor his young patients fret about the cause of a GID diagnosis. The adolescents simply want it dealt with—now. For some male transgenders, Metzger says the prospect of their first period is horrifying, while some female transgenders view their penises as offensive foreign appendages. Anxiety, depression, suicidal thoughts and drug use can follow, he adds. To help patients cope, the B.C. Transgender Care Group follows a "harm reduction" model of medicine. Puberty blockers—which are reversible and can be administered to patients as young as 10—can be initiated before undesired secondary sex characteristics emerge, says Metzger. The treatment not only changes the course of sexual development but also temporarily eliminates patients' sex drive—a huge relief to kids who need to "focus on their transitioning, school and therapy," Metzger says. The hormone blockers—usually Lupron, a $400-a-month injectable synthetic hormone—can be stopped at any time, allowing puberty to resume. For individuals like Cormac who have already gone through puberty, hormone therapy is initiated. This is either oral estrogen or, in Cormac's case, injectable testosterone, replicating the hormones that are normally produced by the ovaries or testes.

Metzger defends early intervention by arguing that the cessation of undesired—and unmistakable—secondary sex characteristics is key to ensuring that transgender adolescents blend seamlessly into an image-obsessed society when they mature. "I have met lots of adults who transitioned in their 20s and 30s and they look at me like I'm the saviour," says Metzger, who began treating transgender adolescents 12 years ago—and none of them have regretted their transition. "They say, 'Oh my God, if there had been someone like you when I was younger, my life would have been totally different. I wouldn't have spent bazillions of dollars on electrolysis or I wouldn't have this enormous square jaw.' They think that the new generation of young transgender kids are so much luckier for being able to do what they knew they wanted to do when they were 12."

Nonetheless, the mental health experts with the B.C. Transgender Care Group are cautious when it comes to approving the irreversible, final step of GID treatment: sex-reassignment surgery. Cormac O'Dwyer's surgery was one of only about five that have

A girl at heart: *Nikki Buchamer says 'life will start' when she looks as feminine as she feels*

THIS SPREAD AND PREVIOUS: PHOTOGRAPHS BY BRIAN HOWELL

been approved for adolescents by B.C.'s Medical Services Plan (MSP) in the past 20 years, says Dr. Gail Knudson, one of the group's psychiatrists. Teens must first complete a full two years of what is called Real Life Experience—engaging with the world at school, work and socially in their chosen gender—in order to be considered for surgery. (Adult transgenders who apply for MSP-funded sex-reassignment surgery only have to make it through one Real Life Experience year.) "It's better for teens to live two years of Real Life Experience, as their identity as a whole is changing," says Knudson. "Think of how many times you changed going through adolescence, not only externally but internally: your hairstyle, clothes and beliefs."

Zucker's point exactly.

Teenagers, never known for their patience, tend to advocate a swifter process. North Vancouver's Nikki Buchamer, for one, feels that this conservative approach can cause unnecessary mental anguish. This past spring, Buchamer, a six-foot 17-year-old with blue-black hair and porcelain skin, went before a panel that included Knudson, hoping to be approved for a vaginoplasty, a procedure that is performed at Montreal's Centre Métropolitain de Chirurgie Plastique, where Canada's two other sex-reassignment surgeons practise. The complex surgery, which when approved is paid for by B.C.'s MSP, creates female genitalia from penile tissue. Wearing a conservative dress, jacket and leggings, with her hair neatly up, Nikki answered questions from the panel that included queries about her early childhood. In the end, however, the verdict on the surgery was no. "I wanted to bawl my eyes out and walk out," says the Grade 11 student.

Nikki, whose birth name was Brandon, had only logged 16 months of Real Life Experience as a female, following counselling that crystallized her understanding that she had GID. She estimates that, by the time she is granted another panel hearing, it will be the end of Grade 12 before she is approved for a vaginoplasty.

Matching her physical body to her gender, she says, will lift a crushing weight off her shoulders. "To wake up and not have to think about being trans, to just think about being a person—life will start at this point," explains Nikki, who has booked surgery this August with Dr. Cameron Bowman to decrease the size of her Adam's apple.

Nikki was turned down for sex-reassignment surgery, but has booked an operation to reduce her Adam's apple

Michele Buchamer, who accompanied her daughter to the sex-reassignment assessment, which was held in Victoria, was also distraught over the decision. "To a teen, every day is equivalent to three weeks. She just wants to be a normal teenager," says the interior designer.

Not all parents of teens with GID are as supportive as Nikki's and Cormac's. Some oppose their teenager's transgendering and refuse to give consent for hormone therapy or puberty blockers. Metzger currently has 60 adolescents under his care, the majority referred to him by the psychologist or psychiatrists at the B.C. Transgender Care Group, a few by their family doctors. But some have come to Metzger on their own initiative without their parents' knowledge after discovering him on the Internet. In B.C., the Infants Act allows Metzger and the B.C. Transgender Group to provide care to these patients without parents' consent so long as the "young person is capable and the medical treatment is in the young person's 'best interests.' "

Raging hormones: *Dr. Metzger consults with a young patient in his Vancouver clinic*

PHOTOGRAPH BY BRIAN HOWELL

In Canada, common law dictates that a "person under the common law age of majority who is capable of appreciating the nature and consequences of a particular operation or other treatment, whether recommended by the treating physician or chosen by the capable young person, can give an effective consent without anyone else's approval being required," David C. Day wrote in 2007 in *The Canadian Bar Review*. The rub, of course, is that a young patient's care is limited by what their physician, psychiatrist or endocrinologist will consent to.

Even though parents can't legally prevent Metzger from initiating hormone therapy for his young patients, he will counsel them to postpone such treatment if it will put them at risk or alienate family members. "If they are going to get kicked out of the house and have nowhere to live, then we might come up with an alternative plan or try to encourage the kid to wait a little longer for therapy, just for their safety," Metzger says. One of his transgender patients, Karina, who asked that her last name not be used, says that her conservative Korean family opposed her transition when she started estrogen therapy at age 17. Her mother sent angry emails to Karina's psychiatrist and lashed out at her daughter. "She tells me that I'm ugly and I sound funny and that I'm screwing up my life," says the petite, long-haired 19-year-old, who is looking for work so she can afford to leave home.

Metzger sighs as he ponders how difficult it is for parents to accept that their child has GID. "I always tell the kids that they are running faster than their parents and the parents are a little bit behind." Some, however, do catch up. "I've seen some super hyper-resistant dads who have come around amazingly."

When Nikki Buchamer thinks back to her childhood, she realizes there were early signs of GID. She was mesmerized, for example, by any TV show, cartoon or book where a character changed gender. GID, indeed, often begins in early childhood, experts say. And many transgenders say that they knew as young as four or five that they were born in the wrong body. Again, however, the most efficacious treatment for young children is cause for debate.

IN TORONTO, Kenneth Zucker treats children as young as five who exhibit early signs of GID. These include, he says, unconventional play behaviour: a little boy might prefer dolls instead of Bionicles and tiaras instead of hockey helmets. Such cross-gender play should be discouraged, says Zucker, or it might become permanent in adolescence. "They just have an easier life—they don't have to go on lifelong therapy or have these incredibly invasive surgeries," he reasons. About 80 per cent of his preadolescent patients outgrow their cross-gender behaviour by puberty, he claims, which supports the rationale for a highly conservative approach to therapy.

In Vancouver, however, Gail Knudson argues that stymying cross-gender play can cause kids to become secretive and hide their behaviour. "It's okay for children to explore their gender at home in a safe way. If they want to dress differently or do different types of activities, that should be encouraged—if not, it goes underground," Knudson says. "Practising different gender roles decreases their dysphoria."

With evidence such as the MRI research pointing toward GID as a physical condition, Knudson questions the notion that it is a mental disorder at all. "If it was a mental disorder and you gave people psychotherapy, it would go away—and it doesn't. If you give people an antipsychotic or antidepressant, it would go away—and it doesn't," she says.

But teens like Cormac care little about the cause of their dysphoria, being more focused on the present. Cormac points out that he can now concentrate on his budding acting career and maintaining honour roll grades at Lord Byng Secondary, rather than obsessing "every minute" about his chromosomal infelicity. Looking to the future, he muses that he might consider undergoing a phalloplasty—the creation of a neo-penis—to complete his transgender journey. But for now, he is simply content in his own skin, happy to be just a normal teenage boy. **ROBERTA STALEY**

PHOTOGRAPH BY SIMON HAYTER: NEXT SPREAD: CALEB KENNA/THE NEW YORK TIMES/REDUX

Basic math: *The big fees paid by international students are a bonanza for public school districts*

EDUCATION

Cashing in on foreign students

Public schools that recruit high-paying international students create, some say, a two-tier system

LAST YEAR, PATRICIA Gartland, who works for a suburban Vancouver school district, brought in $16 million selling 1,700 B.C. classroom spots to foreign students, largely from China and South Korea. Gartland, who started her job as director of international education with the Coquitlam School District in suburban Vancouver over 10 years ago, has made the program in Vancouver one of the most extensive in Canada and the envy of the scores of districts across the country looking to cash in on the growing market for international students.

With international students paying $10,000 to $14,000 to attend Canadian schools, public school administrators across the country are setting up for-profit international student programs to compete for their dollars. One 2009 study estimated some 35,000 foreign students in the K-12 system contribute almost $700 million annually to the Canadian economy—a win-win for students, who get an invaluable leg-up when applying to North American post-secondary schools, as well as district administrators, who make up to 50 per cent profit on the tuition.

International student programs aren't new to Canada, but at the K-12 level they're rarely talked about, although most provinces have had programs for at least a decade. No province has been more successful at bringing in international students than B.C., with some 9,000. Capitalizing on the demand for a Western diploma and an English-language education, B.C. schools compete with Britain, the U.S. and Australia to recruit students overseas. School districts send staff abroad to meet foreign school officials and to attend trade shows. Domestically, the districts liaise with the Lower Mainland's tight-knit Chinese and Korean communities, looking for overseas relatives. Once in Canada, the students live with extended family or billets. The students are offered supplementary language classes in tandem with regular studies, though eventually most opt for the standard curriculum.

B.C. has offered an international student program since the '80s, but recruitment intensified after 2001, according to the British Columbia Teachers' Federation, when the government made cuts to the education system. "School boards were short $275 million," says BCTF president Susan Lambert. New legislation, she says, "encouraged them to find alternative sources of funding." In 2002, Gordon Campbell's Liberal government passed the School Amendment Act; the bill,

seen by some academic experts as a move to embrace a marketized version of public education, cast school districts as business corporations, they say, and parents and students as consumers. By 2007-08, international student enrolment in B.C. peaked at 9,500 students, with an associated revenue of $129 million. But critics say that what's emerging is a two-tier public education system that punishes the districts that need the most help.

Larry Kuehn, research director at BCTF, reports international student programs exacerbate existing inequalities in the public system by making the richest districts—those that can afford to invest in overseas recruitment—richer, and leaving poorer districts in the dust. Ultimately, says Kuehn, the programs are outside equalization factors in the provincial funding system built to circumvent such wealth disparity. Take Coquitlam, Gartland's school board, where international student money has kept enrolment high and schools open, and afforded new development opportunities for staff and "very robust" student services, including a Confucius classroom and the first bilingual Mandarin kindergarten class in the province. "I'm wondering at the irony of an education system that says if you're a for-profit school we're not going to give you any funding at all but as a public school we're going to allow you to sell to foreigners," says Peter Cowley, education policy researcher at the Fraser Institute. "We have seen school districts in B.C. establishing for-profit companies."

The B.C. Ministry of Education, however, rejects the notion that district inequality is an issue. "Each district has the choice of whether to offer such programs," wrote B.C. Education Minister George Abbott in an email to *Maclean's*. "Our school districts have both the autonomy and the responsibility for international student programs."

So the districts that can recruit international students hope to emulate Coquitlam or West Vancouver, where foreign students bring in the equivalent of 16.4 per cent of its operating budget. It may not be the traditional portrait of public education, but it could be the future. In Ontario, for example, the number of international secondary students increased by six per cent between 2007-08 and 2009-10.

Back in Coquitlam, Gartland is developing student markets outside of Asia. But for now, she's sanguine. "Suddenly everyone understands all the great benefits of this," says Gartland. "Our mayor of Coquitlam says our program is bigger than the casino."

STEPHANIE FINDLAY

EXTREME SPORTS

RACE TO WIN, OR DIE TRYING

The Spartan Death Race, one of the toughest physical tests on Earth, attracts 'lunatics'

WHILE THIS YEAR'S Spartan Death Race competitors included everyone from marines to doctors, firefighters and teachers, race co-founder Andy Weinberg says the 155 participants had at least one thing in common: "It's a small, intimate group of lunatics." They gathered in the forested mountains of central Vermont this summer to spend 45 straight hours testing the limits of their physical and mental strength, but only after they had signed off on a concise, chilling waiver: you may die.

While no one died on the course, there were plenty of broken bones, gashes and hypothermia cases. One woman was taken away in an ambulance after she was found knocked out in the woods. The range of injuries isn't surprising given the tasks assigned: swimming in 10° C water, crawling under a maze of barbed wire, hiking upstream through chest-deep river rapids, doing hundreds of squats with a boulder and dragging a log up a snarled mountain trail, to name a few. Veteran adventure racers Weinberg and Joe DeSena say they conceived the Death Race six years ago to fill a void they saw in the endurance racing world. There are no water stations; competitors carry their own. And there is no start or finish line; every element of the obstacle course is a surprise. The race is designed to emulate life, they say. "They have no clue what's going to be thrown at them the weekend of the race," Weinberg says. "We try to frustrate them, we try to break them down mentally." Most don't make it to the end: Weinberg boasts a 10 to 20 per cent finish rate. The annual Death Race is part of a growing trend of fitness and adventure events that make marathons look like grade school cross-country runs. Others include the Antarctic Ice 100-km race and the 217-km Badwater Ultramarathon, which stretches from Death Valley to Mount Whitney, in California.

In tough: *Death Race events include swimming in 10° C water, carrying bikes on your back and crawling under a maze of barbed wire*

In the months leading up to the event, 29-year-old Montreal lawyer Dan Grodinsky chopped wood, attracted stares sprinting up and down Mount Royal with a backpack full of weights, and watched YouTube videos that taught skills such as how to pack a parachute, should he have to jump out of a plane. Since the race itinerary is kept secret, participants have to use their imaginations to prepare. "They think I'm nuts," Grodinsky said of his friends and family, before the race. "I don't think a single one of them really understands why I'm trying to do this. But I'm not sure I do either." He registered after completing the Spartan Sprint and Super Spartan, which are sister events geared to more average athletes that take place several times a year, including in Canada.

Finishers don't walk away with much other than injuries to tend to. There's no cash prize, and the cachet associated with completing a Spartan Death Race is negligible, especially compared to an Ironman triathlon or a big-name marathon. "We're gluttons for punishment," Grodinsky admits. "The human body is not made to be sitting at a desk 24-7. It's made to be pushed," he says.

Orillia, Ont., realtor John David Waite says he was a little bit disappointed after he finished his first marathon a few years ago. "It was still well within my comfort zone," the 43-year-old says. So when he heard about the Spartan Death Race, Waite didn't think twice before signing off on the sinister waiver. His training regimen included immersing himself chest-deep in 15° C water while doing a puzzle on a piece of cardboard he held in one hand. "You have two arms and two legs, and you use them to walk to the subway and type with a keyboard," he says. "The race goes back to a time when everything was hard. The human body is capable of so much more than we give it credit for."

In the end, only 35 of the competitors completed this year's race. Waite was one of them. "I underestimated how difficult the race would be; it was beyond anything imaginable," Waite says. Grodinsky says his breaking point came after 24 hours. He was already shivering and shaking from hypothermia when he began a treacherous mountain climb with a 95-lb. log. At one point, he realized he couldn't keep going, so he walked back down. Despite the cuts, bruises and sores that covered his body after the race, he plans to try again next year. "If you're able to find some happiness in the middle of that misery," he says, "then you're better off for it." **CIGDEM ILTAN**