

A transgender adolescent with chronic pain, depression, and PTSD

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X, a 17-year-old Mexican-American transgender male (assigned female at birth) experienced a traumatic brain injury (TBI) 4 years ago and subsequently developed posttraumatic stress disorder (PTSD). I came to treat X at a pediatric outpatient psychiatric clinic after he developed physiologic dysregulation of his nervous system and began to experience panic attacks, major depressive disorder, and auditory hallucinations. X also developed chronic widespread pain during the next few years, including migraines, abdominal pain, and back pain, which significantly impaired his ability to function socially and academically. X was treated by a child and adolescent psychiatrist who used an integrative approach of traditional and complementary medical practices in a pediatric chronic pain clinic.

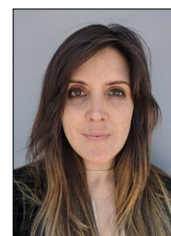
X's treatment course at the pediatric psychiatric clinic included 2 years of field capable mental health services. During this time, fluoxetine was started and titrated up to 40 mg/d to target anxiety and depressive symptoms such as pervasive sadness, poor self-esteem, poor concentration, physiologic arousal, and sleep disruption. Risperidone, 2 mg/d, was temporarily added to address residual mood symptoms and the auditory hallucinations X experienced at school. Neuropsychological testing did not indicate that X had cognitive impairments from the TBI. In the pain clinic, X was encouraged to continue with psychotherapy and the selective serotonin reuptake inhibitor. Another recommendation was to seek out acupuncture and yoga. Over the course of

1 year, X's pain symptoms began to resolve, and his functioning improved significantly. It was during this year that X came out as transgender, first to his friends, and then to his family and his physicians.

The link between PTSD and chronic pain

X's PTSD presented as nightmares, hypervigilance, and anxiety, especially when he was in school. He would often describe how his chronic pain symptoms prevented him from functioning academically and socially. I wondered if X's presentation of PTSD indicated a predisposition for chronic widespread pain symptoms or pain syndromes. This theory could be approximated by an association, but research suggests there is a significant temporal relationship between PTSD and widespread pain symptoms, such as in fibromyalgia.

One multicenter study of patients with fibromyalgia found that the prevalence of comorbid PTSD was 45%.¹ In two-thirds of patients with fibromyalgia, traumatic life events and PTSD symptoms preceded the onset of chronic widespread pain, while in roughly one-third, traumatic life events and PTSD symptoms followed the onset



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Disclosure

The author reports no financial relationships with any company whose products are mentioned in this article, or with manufacturers of competing products.



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Clinical Point

A small study found sex steroids provided relief from chronic pain in female-to-male transgender patients



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of chronic widespread pain.¹ This study suggests that PTSD could be viewed as a marker of stress vulnerability in which individuals susceptible to stress are more likely to develop chronic widespread pain and other health problems, including fibromyalgia, when a traumatic event occurs.

Benefits of transgender-specific care

During the course of X's psychiatric treatment, he eventually revealed that he had been experiencing gender dysphoria for many years. His gender transition was occurring during adolescence; during this time, identity formation is a central developmental task.² X was not comfortable asking others to use his preferred pronouns until he had physiologically transitioned. Any further delay to accessing transgender-specific services would increase the likelihood of a poor prognosis, both behaviorally and medically, because sexual minority adolescents are 3 to 4 times more likely to meet criteria for an internalizing disorder and 2 to 5 times more likely to meet criteria for externalizing disorders.³ My understanding of the minority stress model raised concerns that if X did not get appropriate treatment, the interdependence of stressors of being a sexual minority as well as an ethnic minority would further burden his mental health.

Now that X had access to transgender-specific care, how would management affect his pain symptoms or response to treatment? While some of his pain symptoms began to remit before he came out as transgender, I considered whether hormone therapy might improve his subjective pain. Little research has been conducted in transgender patients to determine whether sex-steroid administration might alter nociception. One study that examined daily fluctuations of sex hormones in 8 women with fibromyalgia found trends suggesting progesterone and testosterone are inversely associated with pain, with peaks of those hormones occurring on days with lower

reported pain.⁴ A small study of female-to-male transgender patients found that administration of sex steroids was associated with relief from chronic painful conditions (headaches, musculoskeletal pain) in 6 of 16 patients who received testosterone injections.⁵ What little evidence I found in regards to an association between gender-affirming hormone therapy and chronic pain left me feeling optimistic that hormone therapy would not negatively affect the prognosis of X's chronic pain.

Another consideration in treating X was the practice of chest binding, the compression of chest tissue for masculine gender expression among people who were assigned female sex at birth. One study found that chest binding can improve mood; decrease suicidality, anxiety, and dysphoria; and increase self-esteem.⁶ However, 97.2% of participants reported at least one negative outcome they attributed to binding. The most common was back pain (53.8%), which X had been experiencing before he began chest binding. I found it notable that X's primary doctors in the transgender clinic kept this adverse effect in mind when they recommended that he take breaks and limit daily hours of chest binding to minimize the risk of increased chronic back pain.

This particular case spanned several specialized services and required coordination and careful consideration to address X's developmental and gender-related needs. X experienced significant symptoms incited by a TBI; however, the manifestation of his chronic pain symptoms were more than likely influenced by several overlapping stressors, including belonging to an ethnic minority, transitioning into adulthood, transitioning publicly as a male, and mood symptoms. While it pleased me to see how X responded positively to the integrative and holistic treatment he received, I remain concerned that simply not enough research exists that addresses how transgender individuals are affected, physically and affectively, by chronic levels of stress attributable to their minority status.

continued

References

1. Häuser W, Galek A, Erbslöh-Möller B, et al. Posttraumatic stress disorder in fibromyalgia syndrome: prevalence, temporal relationship between posttraumatic stress and fibromyalgia symptoms, and impact on clinical outcome. *Pain*. 2013;154(8):1216-1223.
2. Erikson EH. *Identity: Youth and crisis*. New York, NY: W.W. Norton & Company; 1968.
3. Fergusson DM, Horwood LJ, Beautrais AL. Is sexual orientation related to mental health problems and suicidality in young people? *Arch Gen Psychiatry*. 1999;56(10):876-880.
4. Schertzinger M, Wesson-Sides K, Parkitny L, et al. Daily fluctuations of progesterone and testosterone are associated with fibromyalgia pain severity. *J Pain*. 2018;19(4):410-417.
5. Aloisi AM, Bachiocco V, Costantino A, et al. Cross-sex hormone administration changes pain in transsexual women and men. *Pain*. 2007;132(suppl 1):S60-S67.
6. Peitzmeier S, Gardner I, Weinand J et al. Health impact of chest binding among transgender adults: a community-engaged, cross-sectional study. *Cult Health Sex*. 2017;19(1): 64-75.