Urinary Incontinence during Early Adolescence due to a Large Vesicovaginal Fistula Associated with Childhood Sexual Abuse

Dear Editor

Childhood urinary incontinence is defined as the involuntary leakage of urine after toilet training. If this condition recurs throughout the day, birth defects or certain behavioral disorders contributing to this type of incontinence should be suspected. Sexual abuse during childhood or adolescence is associated with urogenital tract disorders and should be taken into account as a contributing factor. It is noteworthy that urogenital fistula is a common complication of prolonged obstructed labor in developing countries. During early adolescence, vesicovaginal fistula (VVF) may be caused by sexual trauma, which is indicative of a history of childhood sexual abuse (CSA).

Here, we describe a case of an 11-year-old girl who was referred to a gynecology clinic with progressively chronic, watery vaginal discharge for three years. She had been repeatedly hospitalized with the diagnosis of refractory urinary tract infection without resolution. Following detailed medical history taking and comprehensive physical examination, she was admitted to a minimally invasive gynecologic surgery center (Tabriz, Iran) for vaginoscopy. Written informed consent was obtained from the patient's trustee for the publication of this article, and confidentiality of any disclosed information was guaranteed. Permission was also obtained from the Ethics Committee of Talegani Hospital (Tabriz, Iran) to access the patient's data.

The vaginoscopy revealed a large VVF with a fibrotic band, attaching the anterior and posterior vaginal walls. A small piece of foreign body was also visible behind the fibrotic band, which was successfully removed. The patient underwent fistula repair surgery after a comprehensive evaluation and urological consultations (figure 1). Unfortunately, our patient stated frequent vaginal and anal penetration with toy-like objects by her caregivers under various pretexts. For this reason, counseling by a social emergency center was provided to prevent further physical and psychosocial injuries. After full recovery, she was discharged, and appropriate socio-emotional support was arranged.

CSA is known as a serious but preventable public health concern. It is usually asymptomatic, and its diagnosis requires a high degree of clinical suspicion and careful physical examination, especially when abnormal genitourinary symptoms manifest during childhood or early adolescence. CSA can unquestionably bring about a wide variety of physical and psychological problems during both childhood and adulthood.

Urinary symptoms are reported in approximately 2%-9% of children exposed to sexual abuse, and its physical consequences include dysuria, urinary urgency, urinary tract infection, daytime and nighttime incontinence, pain, and bleeding.^{2, 5} Therefore, CSA should be suspected in the cases of new-onset urinary symptoms in previously asymptomatic children. In this regard, cardiovascular diseases, chronic fatigue syndrome, obesity, diabetes mellitus, musculoskeletal pain, and infectious diseases are among the physical consequences attributed to CSA.⁶ Moreover, depression, anxiety, specific personality disorders, and post-traumatic stress disorder (PTSD) are well-known psychological

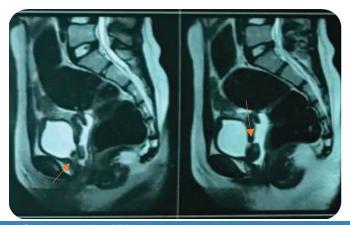


Figure 1: Large vesicovaginal fistula caused by childhood sexual abuse.

effects of CSA during childhood as well as substance abuse, risky sexual behavior, and suicidal behavior during adulthood.⁷ Chronic stress can further induce some changes in the immune system, leading to an excessive response to stressors. This in turn prevents chronic stress to be controlled by the endogenous anti-inflammatory cortisol and causes a chronic inflammatory response, which leads to more hospitalization and medical consultation during adolescence.⁸ Chronic stress can also manifest as PTSD. There is even a documented association between PTSD and excessive immune system responses as well as negative general health consequences, including breathing and sleeping problems, and various gynecological issues.⁹ There is also a link between cognitive and attention-deficit disorders and CSA. As a result, children with attention problems face difficulties in building positive relationships, fulfilling their tasks, and emotion regulation.¹⁰

The findings of this study provide an insight into the relationship between CSA and various physical and psychological problems, and their impact on treatment outcomes. In recent years, CSA has increased in scale, and its impact on the general and emotional health status of children is immense, particularly during the transition to adulthood. It is therefore essential to make CSA prevention programs a high priority in the educational curriculum in all societies to educate children and their parents.⁵ Educational systems in all countries should increase awareness about CSA and provide children with the necessary skills to protect themselves. Although adults, especially parents, are responsible for the safety of their children's social environment, and the friendships they form, they are insufficiently trained in sex education strategies to adequately protect their children. Awareness of caregivers about CSA is directly correlated with children's ability to protect themselves against such abuses.¹¹ Children need to learn by whom and when their private parts can be touched. They must also understand the difference between appropriate and inappropriate physical contact and be able to protect themselves in different situations and even dare to report any inappropriate touching of their genitalia. Factors that may prevent children from doing so include fear of telling the truth, unsupportive responses, and disbelief by the recipients.⁹

In Iran, unfortunately, sex education is not included in the preschool or primary school curriculum. The preschool years are children's first experience of socializing outside the home and a period to learn how to protect and defend themselves against violence and abuse. What they learn during preschool years will greatly impact the way they feel, think, and behave in later stages of life. On the other hand, pediatricians, urologists, and gynecologists play a crucial role in detecting CSA, since they are often the first group of professionals to whom parents turn for help. Their role is further important in the long-term management and follow-up of CSA victims.

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Authors' Contribution

F.T and S.T.N.H: Were involved with the study design, preparing the first draft of the manuscript, and its revision for important intellectual content. The authors have read and approved the final manuscript and accept responsibility for all aspects of the work. They will ensure that questions regarding the accuracy or integrity of any part of the work are duly investigated and resolved.

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