Herpes Zoster in the Medically Healthy Child and Covert Severe Child Abuse

Madhulika A. Gupta, MD, FRCPC, London, Ontario, Canada
Aditya K. Gupta, MD, FRCPC, London, Ontario, Canada

Herpes zoster is associated with depressed cell-mediated immunity and occurs rarely in the medically healthy nonimmunocompromised child. We report 4 cases of childhood-onset herpes zoster in the absence of a medical disorder. All 4 patients reported experiencing severe, chronic child abuse when the herpes zoster first appeared. It is possible that the severe chronic psychologic stress resulting from the abuse depressed the patients' cell-mediated immune status and thereby predisposed them to herpes zoster. Our findings suggest that the clinician's suspicion should be heightened for the possibility of covert child abuse and secondary stress when managing an otherwise apparently healthy child with herpes zoster.

Herpes zoster, or shingles, results from reactivation of the varicella virus that remains dormant in the spinal ganglia after an episode of chicken pox and is usually rare during childhood. Herpes zoster is usually reported to occur in immunocompromised children, and the identification of other risk factors is less certain.[1,2] The most significant common factor responsible for the occurrence of herpes zoster is reported to be depressed cell-mediated immunity,[2,3] and no clear correlation has been found with the patient's humoral immune status. We present 4 case reports of patients who appear to have developed herpes zoster during childhood, in the absence of a medical condition that could have led to an immunocompromised state. All 4 patients reported having to live in exceptionally abusive and chronically stressful environments, where they were subject to severe sexual, emotional, or physical abuse by persons who were supposed to be their primary caretakers. The nature of the abuse is described in some detail here to underscore the fact that abuse of such proportions can go unnoticed by the appropriate social, legal, and medical authorities.

Dr. MA Gupta is from the Department of Psychiatry, University of Western Ontario, London, Ontario, Canada. Dr. AK Gupta is from the Division of Dermatology, Department of Medicine, University of Toronto, Toronto, Ontario, Canada.
REPRINT REQUESTS to 490 Wonderland Road South, Suite 6, London, Ontario, Canada, N6K 1L6 (Dr. MA Gupta).

Case Reports

Patient 1—A 42-year-old woman was referred for psychiatric management of her recurrent major depressive episodes. During the initial psychiatric assessment, the patient recounted a history of severe physical and sexual abuse during her childhood, between the ages of 5 and 16 years, after which she left home. The patient recounted that her father would regularly demand that she pull her pants down so that he could strap her on her bare buttocks with his belt, to ensure that the bruises and welts were not easily visible. He would also sexually molest her at this time, especially if he was drunk. Her mother, who sometimes witnessed the abuse, would blame the patient and refer to her as a "whore and a slut."

During the course of the functional enquiry, the patient reported that she had developed unilateral shingles, affecting her thoracic region, when she was in grade 7, around the age of 13 years. The patient had had chicken pox in grade 2. The patient did not have any other medical disorder that may have compromised her immune status. The shingles were very painful, and the patient had to miss 3 months of school because of them. The patient reported that the sexual abuse had peaked around age 13, when her father apparently tried to have sexual intercourse with her. The stress was further complicated by the patient's fear of becoming pregnant, since she had started menstruating around this time.

Patient 2—A 38-year-old woman was referred for further psychotherapy as a result of childhood sexual abuse. The patient recounted a history of severe sexual abuse during her childhood. She reported that her father regularly molested her. During the day, when her mother was working on the farm, he would attempt to have sexual intercourse with her. The patient had trouble concentrating in school and failed grade 8, after which she essentially worked on

the family farm. At this time, the patient's father became regularly sexually active with her while she was alone with him during the day.

During the course of the functional enquiry, the patient reported that she had developed unilateral shingles, affecting her thoracic region, after she failed grade 8. She was 14 years of age at this time, and had had chicken pox at age 7 years. The patient did not give a history of any other concomitant medical disorders that may have immunocompromised her. The sexual abuse at age 14 was chronic and severe. The patient had become pregnant by her father at this time and had undergone a therapeutic abortion. A review of her hospital records confirmed the abortion at age 14.

Patient 3—A 28-year-old woman was referred for further management of her posttraumatic stress disorder secondary to severe sexual abuse. The patient reported that she was regularly sexually molested by an uncle who was supposed to look after her while her parents were working. The patient believed that the sexual abuse by her uncle started before 4 years of age. The patient reported that her uncle had become sexually active with her as she grew older, and this continued until she was about 14 years of age. The patient reported that her uncle's "attention" made her feel "special," and furthermore, her uncle would buy her expensive gifts and give her money. Between the ages of 5 and 9 years, the patient saw her pediatrician regularly for warts in her genital area and some urinary problems. A review of her medical records confirmed her history of warts and possibly recurrent bladder infections for which she had seen a urologist.

The patient reported that she had had unilateral shingles affecting her lumbar region around 11 years of age. The left-sided herpes zoster was documented in her medical records. The patient had had chicken pox at age 6 years. She did not have a history of any other medical disorders that could have led to an immunocompromised state. The patient reported that at about 11 years of age she had started to become increasingly aware of the severely abusive nature of her relationship with her uncle. However, she also felt "trapped" because of the financial support she was receiving from him.

Patient 4—A 35-year-old man was referred for further management of his depression, which was complicated by chronic abuse of alcohol and diazepam. The patient recounted a history of severe physical and sexual abuse that started before 5 years of age and continued until the patient left home at 18 years of age. By age 18 years, the patient was abusing alcohol and various recreational drugs such as marijuana and LSD. The patient was the youngest of 5 siblings and was sexually abused by his older brothers, who were given the responsibility of babysitting him.

The patient recounted severe abuse: his brothers would attempt to electrocute his genital area "just for fun" and would leave him tied to a chair for several hours while the parents were away. The patient attempted to report the abuse to his parents, who tended to minimize his complaints. The patient believes that he was an unplanned and unwanted child whose birth had adversely affected his mother's career aspirations. When confronted by the parents, his brothers would deny the abuse and subsequently inflict more pain on the patient the next time he was left alone with them to "punish" him for "squealing" on them.

The patient reported that he developed unilateral shingles affecting his thoracic region at about 11 years of age. He had had chicken pox at 6 years of age and had no history of any concomitant medical problems that could have compromised his immune status. At about 11 years of age, the patient had started having increased academic difficulties at school and was made the subject of further ridicule since he had to be transferred to a remedial program.

Comments

Severe psychologic stress has been shown to suppress cell-mediated immunity.[4,5] It is possible that the psychologic stress resulting from the severely abusive life situation(s) resulted in a compromise of the cell-mediated immune status of these patients, which in turn could have predisposed them to herpes zoster.[3] Our 4 patients gave a history of shingles during childhood. In 2 of 4 cases this was corroborated by their medical records. None of the 4 patients had any intervention, medical or legal, for the severe abuse they were experiencing, even though at least 2 of these 4 patients had been medically assessed and the herpes zoster had been clinically confirmed and documented. To our knowledge, there is one recently reported case[6] in which sexual abuse was suspected in a 9.5-year-old child with perianal herpes zoster that was initially misdiagnosed as a sexually transmitted disease, and the presence of sexual abuse was later ruled out. Our preliminary findings from these case reports suggest, however, that the presence of herpes zoster in a nonimmunocompromised child should heighten the clinician's index of suspicion for the presence of a severely stressful life situation, and the possibility of child abuse should be ruled out. Severe psychologic stress can theoretically cause an exacerbation of herpes zoster in all age groups. However, children are the most vulnerable since unreported abuse in this age group can lead to long-term psychosocial morbidity and developmental problems.

These initial case reports, which are largely based on retrospective reports by patients, need to be followed up with clinical and immunologic evaluations of young patients who present with herpes zoster.

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