# **Childhood female masturbation**

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Masturbation is not uncommon in young children. However, it is not usually noticed in children under 3 years old. In this paper I describe a child who had started to masturbate at 5 months of age but in whom the diagnosis was not made until 5 years later.

## **Case report**

A 5½-year-old girl was referred to the Department of Psychiatry, Hospital for Sick Children, Toronto, for "leaning episodes" lasting from a few minutes to several hours. During these episodes the child would lean forward, often over a table or a ledge, and look flushed and preoccupied. This could happen several times a day or as infrequently as a few times a week.

The leaning episodes had begun when the child was 5 months of age and were accompanied by infrequent and brief bouts of crying and leg and arm flexion. Later the crying stopped but the child's breathing became laboured during the leaning episodes.

During the first 2 years her parents had tried different methods of dealing with her behaviour, including distraction, placation and at times anger. However, the frequency of the episodes increased, and they could last from several minutes to several hours. Although the leaning episodes most often occurred at home they also occurred in public places. They did not seem to be related to boredom since the child would sometimes interrupt apparently pleasurable activities with

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Reprint requests to: Dr. Susan J. Bradley, Department of Psychiatry, Hospital for Sick Children, 555 University Ave., Toronto, Ont. M5G 1X8 other playmates and start "leaning". When her language skills increased she would say to anyone attempting to distract her "Wait a minute: I am not finished."

When the child was about 2 years old her family physician referred her to the Gastroenterology Clinic of our hospital for assessment of the leaning episodes and her delayed growth (she had dropped from the 50th to the 10th percentile in 2 years). Although the notes on the child's chart stated that the episodes were not accompanied by pain, the presenting complaint continued to be listed as painful episodes. The nursing staff who observed the episodes described them as being "well within the range of normal behaviour".

The results of physical, hematologic and extensive gastroenterologic examinations, which included a small-bowel biopsy, were unremarkable.

When the child was 5 years old she was referred for allergy testing. The results were negative. Two months later, at a follow-up visit to the Gastroenterology Clinic, the child pointed to her pudendum and vulva as the source of concern. She then underwent an extensive genitourinary evaluation, including intravenous pyelography, voiding cystourethrography, abdominal ultrasonography and culture of urine specimens. All the results were normal.

A month later the parents brought in a film of the child's leaning episodes. A gynecology fellow and a neurologist, both female, assessed the child. In view of the negative results of their investigations and the evidence from the film they both diagnosed masturbation.

Psychiatric assessment revealed that the child had been inhibiting her behaviour at school at the teacher's request. The child described being able to reproduce the same feeling she had during the leaning episodes by rubbing her genital area and reported that it produced plea-

surable, not painful, feelings. The child's grandmother and teacher had both suggested that she was masturbating. The treatment intervention was to consistently discourage the child from exhibiting this behaviour in public.

One year later the frequency of the episodes had decreased and they were seldom seen to occur at school; the parents were aware that she was still masturbating in private, but they were now more tolerant of her behaviour.

### Discussion

Although the genitals are usually discovered in the latter half of the first year, masturbation, the rhythmic manipulation of the genitals accompanied by mounting excitement and what appears to be an orgasm, does not typically occur in children less than  $2\frac{1}{2}$  years old,<sup>1,2</sup> although in some children the same effects may be attained at a much earlier age with rocking.<sup>3</sup>

It has been shown that genital play during the first year of life is related to a positive mother-child relationship.<sup>4</sup> However, the factors that elicit masturbation have been less well studied. Tension, excitement,<sup>2</sup> boredom or lack of stimulation may be contributing factors. Sauzier,<sup>5</sup> in an uncontrolled study of preschool-aged children, found that masturbation was excessive in children who had been sexually abused. Other related factors included infections of the genital system and rashes on the vulva or perineum.<sup>2</sup> Such rashes were at times thought to be the effect as well as the cause.

Balk and colleagues<sup>6</sup> showed that in routine health examinations of children by pediatric house staff the female genitalia were examined half as frequently as the male genitalia. Over more than 3 years the child I have described underwent several unnecessary and expensive investigations of a relatively common and benign behaviour. There may be several reasons why the diagnosis was not made earlier. The masturbation began at an unusually early age, 5 months. The child was not seen by a female physician until after the diagnosis was made. Perhaps pediatricians, especially males, are not likely to think of masturbation occurring in young girls. The nursing staff who felt that the child's behaviour was normal did not communicate their impression to the other medical staff. Finally, the child's retarded growth may have distracted the physicians from the correct diagnosis, which was made by the child's grandmother and teacher.

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## **California encephalitis in New Brunswick**

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California (CAL) serogroup virus activity has been documented throughout Canada, but human disease due to these viruses has been recognized in only three provinces: Quebec, Ontario and Nova Scotia.<sup>1</sup> We report the first recognized case of disease due to a CAL serogroup virus (snowshoe hare [SSH] serotype) in New Brunswick.

#### **Case report**

In August 1984 an illness characterized by headache and malaise developed in an 11-year-old boy. He had a history of eight febrile sei-

Reprint requests to: Dr. J.A. Embil, Infection and Immunology Research Laboratory, Izaak Walton Killam Hospital for Children, 5850 University Ave., Halifax, NS B3J 3G9 zures. On the fifth day of the illness his temperature rose to 40°C, and he had a brief generalized tonicclonic seizure. The fever, accompanied by lethargy and vomiting, persisted for another 5 days, after which the boy recovered.

A lumbar puncture performed on the fifth day showed a lymphocyte count of  $37 \times 10^6$ /L in the cerebrospinal fluid, and a puncture performed on the eighth day showed a leukocyte count of  $340 \times 10^6$ /L, with 74% monocytes and 26% neutrophils, a protein level of 1.04 g/L and a glucose level of 3.8 mmol/L. Computed tomography of the head gave normal results, and an electroencephalogram showed diffuse slowing compatible with encephalitis.

The boy made an uneventful recovery and 1 month later was well. He had not travelled away from Chatham, Northumberland County, New Brunswick for at least a month before his illness.

Hemagglutination inhibition and neutralization tests of serum obtained Aug. 17 and 20 showed a twofold and a fourfold increase respectively in the titre of antibody to SSH antigen as well as lower titres of antibody to three related CAL serogroup viruses: Jamestown Canyon (JC), trivittatus and LaCrosse. In addition, a hemagglutination inhibition test showed antibodies to SSH antigen in the IgM fraction of serum fractionated by the sucrosegradient method.

## Comment

Antibodies to CAL serogroup viruses (SSH and JC) have previously been found in New Brunswick in the white-tailed deer (Odocoileus virginianus), moose (Alces alces americana Clinton) and horse populations.<sup>2</sup> In Northumberland County, where this patient lives, 18 of 20 samples of moose blood collected during 1979 were found by neutralization tests to contain antibodies to SSH, and 2 of 2 samples of horse blood collected during 1977 were found by hemagglutination inhibition tests to contain the same type of antibodies.2

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