Gratification disorder (‘infantile masturbation’): a review

A Nechay, L M Ross, J B P Stephenson, M O’Regan

Background: Little has been published on gratification disorder (‘infantile masturbation’) in early childhood.
Aims: To expand on the profile of patients diagnosed with this condition.
Methods: Retrospective case note review; Fraser of Allander Neurosciences Unit paediatric neurology outpatient department 1972–2002.
Results: Thirty one patients were diagnosed (11 males and 20 females). Twenty one were referred for evaluation of possible epileptic seizures or epilepsy. The median age at first symptoms was 10.5 months (range 3 months to 5 years 5 months). The median age at diagnosis was 24.5 months (range 5 months to 8 years). The median frequency of events was seven times per week, and the median length 2.5 minutes. Events occurred in any situation in 10 children, and in a car seat in 11. Types of behaviour manifested were dystonic posturing in 19, grunting in 10, rocking in 9, eidetic imagery in 7, and sweating in 6. Two children had been previously diagnosed as having definite epilepsy. In nine cases home video was invaluable in allowing confident diagnosis.
Conclusion: Gratification disorder, otherwise called infantile masturbation, is an important consideration in the differential diagnosis of epilepsy and other paroxysmal events in early childhood. Home video recording of events often prevents unnecessary investigations and treatments.
imagery ("teply in the sky") in 7, and sweating in 6. In four patients the events of gratification led to fatigue; in four children sleep was induced. One child displayed cyanosis, lip smacking, staring, shaking, pallor, giggling, and appearing frightened.

Twelve children in our group had been investigated prior to the paediatric neurologyerral referral and diagnosis: seven patients had a standard EEG; four patients had a prolonged EEG monitoring, one with video; two had a brain computed tomography scan; one had electrolytes and blood count measured; and one had a barium swallow and Ph study.

Two children had been given a firm diagnosis of epilepsy prior to referral. One of them had received carbamazepine for presumed temporal lobe epilepsy; the other notably had not been immunised against pertussis because of the presumed diagnosis of epilepsy, and subsequently developed the disease pertussis.

In nine cases home video recording was invaluable in allowing a confident diagnosis.

DISCUSSION
Masturbation in children is commonly recognised to be a variant of normal behaviour. Once the diagnosis is made and there are no suspicions of child sexual abuse requiring further investigation and management, reassurance seems to be the most effective management. Parents prefer the term gratification (or even benign idiopathic infantile dyskinesia) to infantile masturbation as there is less social stigma attached to these terms.

The results of this study, the largest yet published, confirm the position that gratification is most commonly misdiagnosed as epilepsy as has been well discussed by previous authors with smaller series. Dystonia and abdominal pains have also presented as the referral diagnosis. Fleisher and Morrison and Couper and Huynh have described very dramatic examples of masturbation mimicking abdominal pain in girls, where diagnostic assessment in one patient even included intravenous pyelography and cystoscopy-vaginoscopy-proctoscopy under general anaesthesia. Mink and Neil have published a case of masturbation mimicking paroxysmal dystonia (periodic posturing) in a young girl. In our study only one child had been referred with a diagnosis of dystonia. That only one was referred with abdominal pain is not surprising for a paediatric neurology clinic setting.

Misdiagnosis seems to be more likely when direct stimulation of genitalia with the hands is absent, as when there is merely repeated adduction of the thighs, and also when the parents describe their child during the episode to be staring, shaking or "watching television in the sky" (so called eidetic imagery) and having un-vocalised speech with imaginary individuals, and perhaps seem to twitch or move one or more limbs for several minutes at a time. The diagnosis of infantile masturbation is more difficult when the infant or young child seems unhappy during the rhythmic movements. When there are repeated jerky spasms, there may be confusion with epileptic infantile spasms. It is for these reasons that gratification often leads to over-investigation, and occasionally to medication, including with antiepileptic drugs. The administration of sodium valproate, ethosuximide, phenobarbitone, vigabatrin, and ranitidine has been described in our study only one child with masturbation had been treated with carbamazepine before referral, although 69% of all the children were referred with "seizures". It is also of note that no children given the diagnosis of gratification disorder have subsequently been found to have a diagnosis of epilepsy. As well as the considerable variation in the behavioural manifestations, it is notable that the events may be observed at any age in early childhood. There is even one published case of masturbation in utero. In our study the earliest age of the first reported event was 2 months.

Careful interrogation appears to be one of the keys to diagnosis. One of the most important symptoms is that the child may be stopped during gratification if distracted and also shows anger and annoyance when interrupted. Video recording of events has been documented to be of most help in understanding the nature of the episodes. Certainly in our series this was the case in those children for whom we obtained home video recordings. We would therefore stress the importance of home video to prevent unnecessary investigation and treatment of these children.

Authors' affiliations
A Nechay, Neurology department, Paediatric Hospital No. 1, Kyiv, Ukraine
L M Ross, Department Community Child Health, Royal Hospital for Sick Children, Yorkhill, Glasgow G3 8SJ, UK
J B P Stephenson, M O'Regan, Fraser of Allander Neurosciences Unit, Royal Hospital for Sick Children, Yorkhill, Glasgow G3 8SJ, UK

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