

Psychogenic Hiccup in Children and Adolescents: A Case Series

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ABSTRACT

Hiccups can be due to organic diseases or psychogenic causes. Psychogenic hiccup in children is an understudied area. We report a series of four cases presenting with psychogenic hiccups to the Psychiatry Outpatient Clinic of a tertiary care hospital in North India. The cases were aged 11 to 13 years; three of them were males and one female. Three of the patients belonged to a rural background and all of them were from Hindu nuclear families. The duration of hiccups for which treatment was sought ranged from three to fourteen months. The most common gains seen in two of the patients were, lesser scolding from the parents and getting eatables of their choice. The patients were managed by counseling and psychoeducation about the problem and cutting down the secondary gain. Techniques of suggestion and double bind were tried. Two of the patients had improved on the day detailed assessments were done, and all of the patients had improved on follow up. Psychogenic hiccups in children and in the adolescent age group can be effectively managed by using non-pharmacological methods and appropriate education of the parents.

Keywords: Adolescent, children, management, psychogenic hiccup

Introduction

A hiccup is an involuntary, paroxysmal, inspiratory movement of the chest wall, associated with contraction of the diaphragm and accessory respiratory muscles, with synchronous glottis closure^[1] The cause of such hiccups may not always be organic.^[2] Psychogenic causes of hiccups have been described in literature, but mainly in adults. Reports of hiccups of psychogenic origin in children and adolescents have been rare. Here we present a series of four cases in the pediatric age group, who presented with hiccups of psychogenic origin to our center and were treated accordingly.

Case Report

Table 1 depicts cases of the four children and adolescents presenting with psychogenic hiccups seen at the Psychiatry Outpatient Clinic of a tertiary care hospital in North India, between July 2011 and December 2012. The cases were aged between 11 and 13 years; three of them were male and one was

a female. Three of the patients belonged to a rural background and all of them were from Hindu nuclear families. The duration of hiccups for which treatment was sought ranged from three to fourteen months. The problem was episodic in three of the cases and continuous in one. The most common secondary gain that was identified in these cases involved parental acquiescence of school avoidance, lesser scolding from the parents, and getting eatables of choice. The gastrointestinal investigations, wherever conducted, were normal. The intelligence quotient (IQ) was done for three of the cases and ranged from 74 to 84. The patients were managed by counseling and parental psychoeducation about the problem and cutting down the secondary gain. Techniques of suggestion and double bind were tried. Two of the patients had improved on the same day when detailed assessments were done, and all of the patients had improved on follow up.

Discussion

The cases highlight that in children and the adolescent age group, hiccups may present as a manifestation of psychological distress. The psychogenic hiccups are classified under somatic autonomic dysfunction (F45.3) according to ICD 10^[3] and

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Table 1: Cases

	Case 1	Case 2	Case 3	Case 4
Demographic data	13-year-old female, studying in seventh class, from Hindu nuclear family of rural background	11-year-old male, studying in fourth class, from Hindu nuclear family of urban background	13-year-old male, studying in eighth class, from Hindu nuclear family of rural background	14-year-old male, studying in ninth standard, from Hindu nuclear family of rural background
Clinical symptoms	Hiccups since the last four to five months; continuous; worsening since the last one month; absent during sleep	Hiccups since the last 12-14 months, episodically; absent during sleep, talking, eating	Hiccups since the last three to four months, episodically; absent during sleep, talking, eating	Hiccups since the last three to four months, episodically; absent during sleep, talking, eating
Other symptoms	Nil	Temper tantrums	Social phobia	Nil
GI investigations	Ultrasound abdomen and upper GI endoscopy normal. Liver functions within normal limits	Ultrasound abdomen normal. Liver functions within normal limits	Nil	Nil
Family history	Similar and present in cousin brother	Nil	Nil	Nil
Secondary gains	Able to avoid going to school. Parents stopped scolding the patient	Able to avoid going to school. Parents stopped scolding the patient. Able to get eatables of choice and extended television time	Able to avoid going to school. Parents stopped scolding the patient	Able to avoid going to school. Parents stopped scolding the patient. Getting eatables of choice
Psychological investigations	IQ = 75	IQ = 74	Could not be done	IQ = 84
Treatment	Counseling and psychoeducation of family members to cut down secondary gain	Counseling and psychoeducation of family members to cut down secondary gain	Counseling and psychoeducation of family members to cut down secondary gain. Patient put in double bind, suggestion used	Low-dose benzodiazepines. Counseling and psychoeducation of family members to cut down secondary gain
Outcome	Symptom resolution in four days	Patient improved in seven days and no recurrence of symptoms	Patient improved on the day of detailed assessment when double bind was used	Improved completely on the same day of detailed assessment. Maintained well on follow-up

undifferentiated somatoform disorder according to the DSM IV TR.^[4] Whether the symptoms were intentionally produced cannot be commented with complete accuracy, as the boundaries between unconscious and conscious productions of symptoms blur.^[5] Yet, on assessment of the patient by trained psychiatrists, a diagnosis of psychogenic vomiting was considered the most appropriate in the above-mentioned cases.

Intractable hiccups are similar, but not synonymous with psychogenic hiccups. In-fact psychogenic hiccups are considered a subtype of intractable hiccups; the other causes of intractable hiccups being organic or idiopathic.^[6] In a series of 220 adult patients, about 22% of the cases seemed to have a psychogenic cause for intractable hiccups.^[7]

The reported cases of psychogenic hiccups from India are few.^[8] The reports of psychogenic hiccups in children and adolescents are also scarce worldwide. This is perhaps the first case series of psychogenic hiccups in children and adolescents from India.

Various treatments have been suggested for the treatment of psychogenic hiccups. These include a wide variety, ranging from hypnosis to yogic therapies to attempts at changing family situations and the family dynamics, among others.^[9] In the present

cases, educating the family members to cut down the secondary gains helped substantially to reduce the symptoms. The use of double bind and suggestion were also effectively used to treat the cases.

The cases described herein suggest that psychological factors may cause and exacerbate hiccups, and such patients can be effectively treated. Eliciting contributory psychosocial and emotional factors before subjecting a patient to extensive and potentially hazardous medical diagnostics would help in prudent clinical care. Such symptoms when present in children and adolescents require consideration to the developmental aspects and sympathetic understanding of the associated problems and stressors.

References

1. Kolodzik PW, Eilers MA. Hiccups (singultus): Review and approach to management. *Ann Emerg Med* 1991;20:565-73.
2. Lembo AJ, Aronson MD, Eamranond P. Overview of hiccups. UpToDate. Waltham MA: UpToDate Inc; 2012.
3. The ICD-10 Classification of Mental and Behavioural Disorders : Clinical Descriptions and Diagnostic Guidelines. Geneva: World Health Organization; 1992.
4. American Psychiatric Association. Diagnostic and Statistical Manual of mental disorders DSM-IV-TR

- (Text Revision). Washington, DC: American Psychiatric Association; 2000.
5. Feldman MD, Cunnien AJ. Factitious disorder in medical and psychiatric practices. In: Rogers R, editor. New York: Clinical Assessment of Malingering and Deception; 2008. p. 128-44.
 6. Rousseau P. Hiccups. *South Med J* 1995;88:175-81.
 7. Souadjian JV, Cain JC. Intractable hiccup. Etiologic factors in 220 cases. *Postgrad Med* 1968;43:72-7.
 8. Bhatia MS, Agrawal P, Khastbir U, Rai S, Bhatia A, Bohra N, *et al.* A study of emergency psychiatric referrals in a government hospital. *Indian J Psychiatry* 1988;30:363-8.
 9. Bobele M. Interactional treatment of intractable hiccups. *Fam Process* 1989;28:191-206.

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