

# Intractable paroxysmal sneezing

PUSHKAS GOPALAN, SIMON T. BROWNING, F.R.C.S.

## Abstract

Intractable paroxysmal sneezing is a rare disease primarily affecting teenage girls. We present the case of a 12-year-old girl who demonstrated the classical features of intractable paroxysmal sneezing of psychogenic origin. Most of the reported cases are psychogenic in origin, but a number of other conditions may cause intractable paroxysmal sneeze. Apart from a detailed history, clinical examination and relevant investigations, topical nasal anaesthesia should be tried for control of symptoms – that will help to differentiate psychogenic sneezing from organic sneezing. A timely diagnosis can avoid unnecessary medical trials, parental anxiety and poor school performance, as most of the patients are very young.

**Key words:** Sneezing

## Introduction

Intractable paroxysmal sneezing is defined as sudden violent sneezing of unusual frequency and duration that is generally psychogenic in origin and is resistant to usual treatment.<sup>1</sup> This is a rare disease primarily affecting young girls. Approximately 80 per cent of the reported cases are psychogenic in origin.<sup>2</sup> Other causes are listed in Table I.

Intractable paroxysmal sneezing due to psychogenic factors is described as 'pseudo-sneezes which occur with atypical rate and rhythm, with the eyes open and which are absent during sleep or when the patient is alone'. This can be a manifestation of the hysterical conversion reaction. Physical examination of the patients is usually normal, but may show mild swelling or congestion of the nasal mucosa.<sup>2</sup> Most of the patients are teenage girls. Approximately 25 per cent of the reported cases resolve without any forms of treatment, except counselling of the patient and family.<sup>2</sup>

## Case 2

A 12-year-old schoolgirl was seen in the ENT casualty clinic with a one-week history of continual sneezing. There was no history of allergy, eczema, asthma or hay fever or fits and she had not attained menarche. The sneezing was aperiodic, continual and occurred with the eyes open. Full blood count, serum electrolytes, liver function test, renal function test and the radioallergosorbent test (RAST) were normal. During the initial stages she was treated with antihistamines, antibiotics and steroid nasal sprays all of which failed to work. Application of local anaesthetic to the nose did not cause any change in symptoms and parents denied the patient having any psychological problem either in the family or at school. An appointment was arranged for neurology consultation. The matter was discussed in detail with her parents.

A follow-up consultation by telephone found that the patient had stopped sneezing. The parents had discovered that there was bullying at school and after them confront-

ing their child with this, the symptoms stopped. Subsequently the arrangements for further investigations and consultations were cancelled. She has been absolutely symptom-free over the last nine months.

## Discussion

When a young patient presents with classical features of intractable paroxysmal sneezing, a possible psychogenic aetiology should always be considered, especially if there are primary or secondary gains associated with the clinical symptoms because it can be a manifestation of an underlying hysterical conversion disorder.<sup>2</sup> For the proper work up of such a case, a comprehensive history and clinical examination are essential. The ideal way to get a good history is to interview the child both separately and in the presence of family members after establishing a rapport with them.<sup>2</sup> The history should include a detailed

TABLE I  
CAUSES OF INTRACTABLE PAROXYSMAL SNEEZING

Other causes	Examples
<i>Allergic reactions</i>	
Autonomic reflexes	Body surface chilling, sunlight, <sup>3</sup> strong odour, irritants
Hereditary syndrome of sneezing with full stomach <sup>4</sup>	
Infections	Common cold, measles, Pertussis, <sup>5</sup> poliomyelitis, <sup>6</sup> TB lymphadenitis. <sup>7</sup>
<i>Local factors</i>	
Recurrent laryngeal nerve compression	Septal deviation, foreign body, turbinate hypertrophy
Seizure disorder <sup>9</sup>	Due to parathyroid adenoma <sup>8</sup>
Triethanolamine sensitivity <sup>10</sup>	
Vasomotor nasal congestion	Pregnancy, menstruation, Sexual excitement, <sup>11</sup> orgasm

From the Department of Otolaryngology, Singleton Hospital, Swansea, UK.  
Accepted for publication: 2 May 2002.

medical history – seizure disorder, motor or vocal tics (Tourette syndrome), allergy and sensitivity and psychosocial evaluation – previous psychiatric problems, unexplained somatic symptoms,<sup>12</sup> role models for the symptoms experienced,<sup>13</sup> detailed family history, performance in school etc. If there is any provoking factor we should also look for any primary or secondary gain associated with the presenting complaints, which, when present, points towards an hysterical conversion reaction.

It is said that apart from routine tests, an unsuccessful trial of intranasal anaesthesia to alleviate sneezing is essential to diagnose the case as a psychogenic one.<sup>6</sup> Once psychogenic aetiology has been confirmed, the patient needs a systematic approach. In a detailed discussion with the patient and family, the various investigations and drug trials the patient had already had and their significance should be explained. Then slowly explain about the precipitating factor and reassure them that this sort of response to crisis can happen occasionally and the symptoms usually regress spontaneously.<sup>2</sup> The patients should always be encouraged to verbalize their feelings.

Other modalities of treatment include hypnosis, amyltal interview, behavioural technique, psychotherapy, medications such as antidepressants. The patients should always be encouraged to attend for follow-up with the medical team, as there is risk of developing other psychiatric problems later in life.<sup>2</sup>

### Conclusion

A case, which showed classical features of the rare disease intractable paroxysmal sneezing is reported. Although the patient had basic investigations and initial drug trials, a high degree of clinical suspicion together with whole-hearted support from the parents helped us to make a proper diagnosis at an early stage. More importantly, the patient would have undergone a battery of unnecessary investigations and medical treatments, if we had missed the diagnosis at this stage.

### References

- 1 Kaplan MJ, Lanoff G. Intractable paroxysmal sneezing – a clinical entity defined with case reports. *Ann Allergy* 1970; **28**:24–7
- 2 Fochtman LJ. Intractable sneezing as a conversion symptom; psychosomatics. *Psychosomatics* 1995; **36**:103–12
- 3 Everett HC. Sneezing in response to light. *Neurology* 1964; **14**:483–90
- 4 Teebi AS, Al-Saleh QA. Autosomal dominant sneezing disorder provoked by fullness of stomach. *J Med Genet* 1989; **26**:539–40
- 5 Ramber AC. Paroxysmal sneezing in whooping cough. *J Pediatr* 1936; **8**:582–3
- 6 Shapiro RS. Paroxysmal sneezing in children; two new cases. *J Otolaryngol* 1992; **21**:437–8
- 7 Shapiro SL. Paroxysmal sneezing. *Eye Ear Nose Throat* 1967; **46**:1532–8
- 8 Foster AH, Nichol WW. Parathyroid adenoma: a case report with unusual clinical features. *Ann Surg* 1957; **145**: 279–81
- 9 Kofman O. Paroxysmal sneezing. *Can Med Assoc J* 1964; **91**:154–7
- 10 Herman JJ. Intractable sneezing due to triethanolamine sensitivity. *J Allergy Clin Immunol* 1983; **71**:339–47
- 11 Mackenzie JN. Irritation of the sexual apparatus as an etiological factor in the production of nasal diseases. *Am J Med Sci* 1884; **87**:360–5
- 12 Munford PR. Conversion disorder. *Psychiatr Clin North Am* 1978; **1**:377–90
- 12 Ziegler F, Imboden J, Meyer E. Contemporary conversion reaction: a clinical study. *Am J Psychiatry* 1960; **116**:901–9

Address for correspondence:

Dr Pushkas Gopalan,  
Room 17, Floor 2, Parkstone House,  
Poole General Hospital,  
Poole, Dorset BH15 2NG, UK.

E-mail: gpushkas@hotmail.com

---

Dr P. Gopalan takes responsibility for the integrity of the content of the paper.

Competing interests: None declared

---