Psychogenic vomiting¹

OSCAR W. HILL

From the Academic Department of Psychiatry, The Middlesex Hospital, London

There have not been many systematic studies of psychogenic vomiting outside the setting of anorexia nervosa and hyperemesis gravidarum.

Wilbur and Washburn (1938) collected 140 patients with this disorder but unfortunately they devote little space to the psychological factors involved. A recent review by Cleghorn and Brown (1964) gives much more attention to psychogenesis. They do not cite their own experience but draw on the sparse accounts that are available for a profile of these patients. They are described as dependent personalities with immature sexuality and impaired parental relationships. Their episodes of vomiting are often related to a fear of heterosexuality. It is difficult to believe that the consequences of such common deficiencies of character formation can be the specific determinants of vomiting, and it seems essentially more likely that they act as general sources of stress and strain and maladaptive relationships in a person otherwise predisposed to vomit.

The study reported here was an attempt to explore psychopathological features that may be more specific to the induction of vomiting. Significant aetiological factors have been compared in a group of psychogenic vomiters and in a control group suffering from psychogenic abdominal pain. Patients with anorexia nervosa and hyperemesis gravidarum were not included in the series. In the case of pregnancy the situation is so well defined and the fact of bearing a child is such an obvious aetiological agent that it is best considered apart, although of course it is likely to contain some similarities to other situations that induce vomiting. In anorexia nervosa, the vomiting is usually self-induced although these patients may often with great skill deny and conceal that they are causing themselves to vomit, sometimes going further to deny completely that they are vomiting (Crisp, 1967). In such patients the vomiting is a voluntary act aimed at trying to cope with the patient's central problem of keeping her weight down.

MATERIAL AND METHODS

Of the 20 patients presented in this study 15 had been

referred to me for help. The other five were seen as part of a project in which a consecutive series of patients suffering from abdominal pain for which no organic cause could be found were investigated psychiatrically. These five had been selected by the referring physician as suffering significantly from vomiting in addition to pain. The entire group of patients with pain is the subject of another study (Hill and Blendis, 1967), and, with the omission of the five patients who also vomited, has been used as a control group in this study. The fact that both groups were suffering from a psychogenic disorder of the gastrointestinal tract differing only in their final 'choice' of symptom, lent some hope that any differences found in their background might be specifically associated with the induction of vomiting.

I saw all the patients of both groups and submitted them to the same style of interview, which followed conventional lines for the elicitation of biographical data in a loosely structured fashion. Patients were seen further when indicated. All comparisons have been made using the fourfold table test, single tailed, unless otherwise stated.

RESULTS

The vomiting group contained 14 women and six men; 14 of the group of 20 had at some time been married. The control group comprised nine women and 13 men. Fourteen of the 22 had at some time married. The average age in each group was 38.

PHYSICAL SYMPTOMS The current episode of vomiting for which the patient was seen had lasted from six months to seven years, during which time 10 of the patients had lost 1 stone or more in weight. In all cases the vomiting was worse at meal times, coming on during the meal or soon after. In all but one patient the vomiting was accompanied by nausea. Three patients had at some time in their illness suffered episodes of paralysis of uncertain origin but to which hypokalaemia had probably contributed. Of all the psychogenic vomiters seen, these three possessed the lowest serum potassium levels. This trio of patients has been fully described elsewhere, together with a more detailed discussion concerning the genesis of their muscular symptoms (Hill, 1967).

¹A preliminary report on some of the patients in this paper was given at the Annual Meeting of the British Society of Gastroenterology in November 1966.

Only one of the patients ceased to menstruate for more than two cycles and this occurred at a time when she was gaining weight and not vomiting.

STATUS OF THE PATIENT'S CURRENT MAJOR RELATIONSHIP The patient's current major relationship was taken to be the spouse (or other cohabitee) or a parent with whom the patient was living. When such relationships were examined in the two groups of patients, there was a great preponderance of antagonistic relationships amongst the vomiters. Brief individual sketches for all the patients are given in the appendix.

It will be seen that 12 patients at least, could be considered as living with a person to whom they were fundamentally antagonistic. Of the remaining patients, one relationship was suspect but indeterminate due to language difficulties (case 5). Another, now living alone (case 3) was hostile both to her husband and mother, her vomiting being exacerbated when she stayed with the latter. The remaining six patients (cases 6, 8, 13, 14, 19, 20) experienced antagonism to significant people in their lives but not in so striking a manner as the other patients.

CONTROLS

FEMALES Of the seven married women only one admitted to having a difficult husband. She described him as a selfish, demanding person who would upset her by having rows with their daughter. Of the two unmarried women (aged 16 and 19), neither had any significant male friend and both got on tolerably well with their parents. None of the women had aged parents living with them.

MALES Of the seven married men, one admitted to having a difficult wife whose bouts of aggressiveness would bring on his pain and diarrhoea. Two were separated from their wives but happy in their cohabitation with other women. Of the six bachelors, four were aged over 30 and none of them revealed any particular antagonisms in their domestic situation. Of the remaining two (aged 16 and 21) one felt some antagonism to the parents with whom he lived but was happy with a girl-friend with whom he spent a lot of time away from home.

In summary, of the control patients it can be said that only two were involved in domestic situations comparable to 12 out of 20 of the vomiters. Comparing the incidences, $p = <0.001$ (12/20 v 2/22). As the sex ratio is different in the two groups, separate comparisons have been made for the two sexes. For the women, $p = <0.05$ (8/14 v 1/9) and for the men $p = <0.025$ (5/6 v 1/13).

DEATH AND SEPARATION

Nine patients had lost a parent by death before reaching the age of 15. Three had lost their mothers (at ages 18 months, 4, and 10 years) and six their fathers (at ages 6 months, 5, 6, 10, 12, and 14 years). The control group had lost one mother and one father during childhood ($p = <0.05$, two-tailed, for the difference). Various estimates are available for the risk of being orphaned. In a study of 2,500 psychiatric patients, Hill and Price (1967) found an overall rate of 18.2% which represents an overestimate as it is swollen by the excessive bereavement of the depressed patients included in the group. The figure of 17.4% of orphans found by the 1921 Census is also an overestimate due to the Great War. Comparing our finding of nine in 20 against an expectation of 18%, $p = <0.005$ (Fisher's exact probability).

There were significant separation experiences in a further three patients. One had been brought up by grandparents until the age of 7, at which time her parents, who were much less affectionate towards her, reclaimed her. She remembers vomiting repeatedly at that time. A second patient had a very close attachment to a young nanny who died when the patient was aged 7. The third was separated from an identical twin for the first time at the age of 14. For the subsequent six months she vomited repeatedly. Although she suffered no abdominal pain, her appendix was removed at which the vomiting ceased. Her twin returned at about this time.

In the control group, in addition to the two bereavements, one patient had a father who had deserted the parental home. The patient continued to visit him regularly.

HISTORY OF VOMITING IN CHILDHOOD

Ten of the vomiters gave a history of being subject to recurrent spells of vomiting in childhood. Four of these patients could remember the circumstances in which their vomiting began and they were all in a setting of separation. Two have already been referred to above. The third began to vomit when her father having died she was removed to an orphanage, and the fourth began after an admission to a hospital.

In the control group only one patient admitted to recurrent vomiting in childhood, but as not all the patients were systematically questioned on the subject, this may represent an underestimate. Accordingly a group of 20 unselected female surgical patients were specifically questioned about vomiting and only one of these recalled being a vomiter in childhood ($p = <0.005$, 10/20 v 1/20).

FAMILY HISTORY OF VOMITING

Nine of the patients gave a family history of functional or persistent organic vomiting. In six of these, the family history extended to three generations. In the 20 surgical patients who were interviewed on the subject of vomiting, none reported the symptom in a parent but one had an affected sibling ($p = <0.005$; $9/20$ v $1/20$).

TREATMENT

No controlled observations on treatment were made. During the interviews there was considerable catharsis of the patients' hostility, and in some cases this was associated with considerable nausea and in one case, actual vomiting. Phenothiazines, usually chlorpromazine about 200 mg/day, gave considerable symptomatic relief. The character structure and social situation of most of the patients were such that there could be little hope of any major change in their position. They were, however, allowed to develop a dependent relationship which they found helpful.

Only one of the patients was thought to be significantly depressed and was treated accordingly with antidepressive medication and psychotherapy.

DISCUSSION

Within its limits this study suggests the importance of a particular sort of situation that may produce vomiting. Although patients vomit as a response to many different sorts of stresses, and many people exposed to the adverse circumstances here described do not vomit, it appears that a feature of psychogenic vomiting is that the individual feels trapped in a hostile relationship. The consequences of such situations have been recognized in our language by the common usage of phrases, such as, 'I am sick of...', 'It's enough to make you vomit', etc. Hostile relationships can be a feature of everyone's existence and such relationships outside the home were common in the control group, chiefly at work, but the significant feature of the vomiters was that they were sharing the same house and eating at the same table as the source of their antagonism. Most of the patients vomited chiefly at meal times and this may well be meaningfully related to the stressful situation of eating with someone who arouses strong emotions. Where antipathies exist in a family, the only time when members cannot avoid one another is when they sit down to meals together. Alvarez (1951) from his rich clinical experience had also gained the impression that these patients feel trapped in a major relationship. In the allied condition of

hyperemesis gravidarum, Harvey and Sherfey (1954) also observed that resentment was an important feature of the patient's current position although Chertok, Mondzain, and Bonnaud (1963) found that ambivalence towards the foetus was a commoner feature than frank rejection among vomiters. It is a universal finding that psychogenic vomiting is much commoner among women than men. In the light of our findings it may be due to the greater passivity of the female when faced with an unsatisfactory relationship. Thus, none of the vomiters had ever taken active steps to break off an unsatisfactory relationship whereas two of the control series had left their wives and were living happily with other women.

The vomiter's persistence in her social bonds could be related to our other finding of an excessive amount of loss in childhood. The experience of a major loss when young may have made the individual particularly reluctant to accept a further loss in later life, making them more likely to persist in an unsatisfactory relationship when another individual may well 'cut his losses' by breaking away. One implication of the work of Greer (1966) is the greater likelihood with which those who have experienced childhood losses will, with an adult loss, respond with the greater despair that leads to a suicidal attempt. In three of our patients there was a clear recollection of their vomiting in childhood being initiated by the experience of a loss. Amongst the other patients the study was handicapped by the absence of an independent informant to supplement the meagre memories of childhood. There is a surprising lack of information available about the somatic accompaniments of grief in childhood but one of the three cases cited by Keeler (1954) was a boy of 7 who developed severe vomiting following the loss of his father. It is apparent from the data that our group of vomiters displayed to a significant degree a tendency to vomit freely in their childhood. It is not possible to say from the evidence whether this tendency was determined by psychological factors or whether it represents a congenital set of their autonomic reactivity. The fact that there appears to be an appreciable family history of vomiting in these patients does not help us to distinguish between the effects of heredity and environment. It is easy to see how the sympathetic experience of nausea as a response to another's vomit could act as a determining link between a mother's vomiting and her child. Equally a mother's excessive reaction to her child's vomiting due to her own vulnerability could reinforce the response in the child. Apley and McKeith (1962) point out that vomiting children often have parents who vomit. They also stress the importance of emotional factors in the causation of childhood

vomiting. Hoyt and Stickler (1960) in a follow-up study of childhood vomiting found that eight out of 38 children persisted in vomiting. Unfortunately in seven of these eight children the follow-up period had been less than five years. A further nine patients were found at the time of follow-up to be suffering from recurrent headaches. Three of our own patients suffered from migraine but the vomiting occurred independently of the headaches. More evidence linking adult vomiting syndromes with an established tendency to vomit when under stress comes from Harvey and Sherfey (1954). They found that patients with hyperemesis gravidarum had often vomited under stress even when not pregnant. Unfortunately they do not state whether their vomiting began in childhood.

SUMMARY

A comparison was made between the life stories of patients suffering from psychogenic vomiting and another group suffering from psychogenic abdominal pain without vomiting.

The chief features that emerged amongst the vomiters, were an excess of individuals locked in an inescapable hostile relationship within their family group, and an excessive amount of childhood parental loss together with a history of recurrent vomiting at that time and an increased family history of vomiting.

The majority of these patients lost 1 stone or more in weight during the period of vomiting and three were thought to have a significant degree of hypokalaemia.

Treatment by verbal catharsis, a supportive relationship, and phenothiazine drugs appeared to be helpful.

REFERENCES

- Alvarez, W. C. (1951). *The Neuroses*. Saunders, Philadelphia.
- Apley, J., and McKeith R. (1962). *The Child and His Symptoms: A Psychosomatic Approach*. Blackwell, Oxford.
- Chertok, L., Mondzain, M. L., and Bonnaud, M. (1963). Vomiting and the wish to have a child. *Psychosom. Med.*, 25, 13-18.
- Cleghorn, R. A., and Brown, W. T. (1964). Psychogenesis of emesis. *Canad. psychiat. Ass. J.*, 9, 299-312.
- Crisp, A. H. (1967). The possible significance of some behavioural correlates of weight and carbohydrate intake. *J. Psychosom. Res.*, 11, 117-131.
- Greer, S. (1966). Parental loss and attempted suicide. *Brit. J. Psychiat.*, 112, 465-470.
- Harvey, W. A., and Sherfey, M. J. (1954). Vomiting in pregnancy. *Psychosom. Med.*, 16, 1-9.
- Hill, O. W. (1967). Psychogenic vomiting and hypokalaemia. *Gut*, 8, 98-101.
- , and Blendis, L. (1967). Physical and psychological evaluation of 'non-organic' abdominal pain. *Ibid.*, 8, 221-229.
- , and Price, J. S. (1967). Childhood bereavement and adult depression. *Brit. J. Psychiat.*, 113, 743.
- Hoyt, C. S., and Stickler, G. B. (1960). A study of 44 children with the syndrome of recurrent (cyclic) vomiting. *Pediatrics*, 25, 775-780.
- Keele, R. (1954). Children's reaction to the death of a parent. In *Depression*, edited by Hoch, P. H. and J. Zubin. Grune and Stratton, New York.
- Wilber, D. L., and Washburn, R. N. (1938). Clinical features and treatment of functional or nervous vomiting. *J. Amer. med. Ass.*, 110, 477-480.

APPENDIX

FEMALE VOMITERS

CASE 1 Patient loathes husband whom she describes as feckless, affectionless, and impotent. She would like to leave him but feels that there is nowhere that she can go. The vomiting began within a few weeks of their marriage.

CASE 2 Patient loathes husband, considering him to be selfish and dirty in his habits. Although they continue to live in the same house she rarely speaks to him. She continues to prepare his meals because she believes it to be her duty.

CASE 3 Married to an improvident, psychopathic husband who has now deserted the marital home. She still allows him to visit socially because she feels so lonely. She feels very guilty about her inability to look after her elderly, demanding, chronically sick mother who lives on the Continent. The vomiting began on a visit to the mother and has been exacerbated on subsequent visits.

CASE 4 Married to an alcoholic bully to whom she has brought the police because of his brutality to the children.

CASE 5 An adequate assessment was difficult because the husband had to act as an interpreter. She stated through him that the marriage was a happy one although the vomiting had started within a few weeks of the marriage which had been an 'arranged' match.

CASE 6 A diabetic widow living alone who bitterly resented the lack of interest and sympathy displayed by her younger sisters whom she had helped to bring up.

CASE 7 Happily married to her second husband but she has a very difficult mother living with her whom she feels in duty bound not to criticise. The mother suffers from repeated episodes of depression associated with hysterical and phobic symptoms.

CASE 8 Denies any problems with her husband but is antagonistic to her alcoholic mother who lives near them.

CASE 9 Separated for many years from her husband. She has lived ever since then with an egocentric demanding father who distresses her, among other things, by constantly playing with his penis in her presence.

CASE 10 Husband is 25 years older than the patient. He is often morose and withdrawn and will often go weeks without saying a word to her.

CASE 11 A spinster, the sole companion and support of an aged, depressed, cantankerous mother with whom she lives. The patient tolerates the position because she considers it to be her duty.

CASE 12 Spinster, the sole support of an aged father and stepmother with whom she lives. They are a considerable burden to her by reason of their physical disability and querulous demands. She has promised them that come what may, she would never allow them to go into a home for the aged.

CASE 13 Aged 18, the mother has had a depressive illness and is often irritable with the patient.

CASE 14 Aged 23, the father has episodes of rage that frighten her.

CASE 15 He is frustrated by his wife's frequent refusals of sexual intercourse. He suspects her of infidelity and is jealous of her to a degree that he himself recognizes as bordering on the morbid.

CASE 16 He has been involved in a state of long-entrenched bitter warfare with a wife who is highly

abusive of everything that he is or does. He is impotent and infertile.

CASE 17 His wife is frigid and chronically depressed. He feels very frustrated by his lack of sexual satisfaction and has been detected by her in one episode of infidelity that has increased the bitterness of their relationship.

CASE 18 Extreme friction with wife. He would like to leave her but cannot because he would thereby lose his child.

CASE 19 An adolescent boy, living with his widowed mother who favours her much pleasanter younger son. The patient is aware of great hostility towards both of them.

CASE 20 A bachelor who denies all problems. He lives at home in 'peace' with a father who suffers from rheumatoid arthritis and an asthmatic mother.