

CASE REPORT

An unusual cause of vomiting in a palliative care setting

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ABSTRACT

Control of symptoms, including nausea and vomiting, is central to palliative care. Self-induced vomiting in a middle-aged male patient with a life-limiting abdominal malignancy provided a challenge in diagnosis and management. This case report discusses diagnostic and therapeutic considerations.

KEYWORDS: Self-induced vomiting, Palliative care

CASE REPORT

A 50-year-old male attorney was transferred to hospice inpatient unit from home care for symptom control 17 months after diagnosis of T3N1M1 colorectal adenocarcinoma. At diagnosis, review of symptoms was negative for nausea and vomiting. Weight was 103 kg. Initial therapy was surgical. Liver metastases were not resectable. Chemotherapy was not effective. Plan was for comfort measures.

The agency reason for transfer was for “intractable nausea/vomiting, projectile six times per day, high anxiety, restlessness, paranoia.” Multiple antiemetics and anxiolytics had been used in varying dosages and combinations. Failures included ondansetron HCl, prochlorperazine, metoclopramide, dronabinol, dexamethasone, haloperidol, lorazepam, promethazine, and lansoprazole. On inpatient admission, blood pressure was 110/80, pulse 98, temperature 37, pain 0/10. The patient was agitated and would not answer questions. He requested reassurance that the computerized ambulatory drug delivery (CADD) was operant. He carried an emesis basin. His chief complaint was, “I want to sleep.” The

statement was clarified: he meant sleep, not death. He denied nausea or vomiting saying, “those are controlled now.” Medications include promethazine, ondansetron IV, metoclopramide, dexamethasone, and morphine CADD at 3mg/hour. The patient ate a general diet in reasonable portions and was able to go out on passes with family. Bowel function was normal. On physical examination, weight was 93.8 kg. The patient was a healthy-looking white man, articulate, well-informed, and guarded. His observed behavior showed neither obsession nor compulsion. Abdominal examination showed active, normal bowel sounds present with a 5 × 5 cm periumbilical tumor mass palpable. The liver was not palpable. Neurological examination showed nothing localizing. Assessment was that symptoms were controlled. Aggressive measures were ordered to prevent opioid-induced constipation. Otherwise, medications were not changed.

Home care team records were reviewed. Of note were the following: social workers visits had been discontinued at family request because the patient was “a very private person.” Chaplain visits were also declined. There was a quotation from the patient to the registered nurse: “I’m throwing up too much.” Family brought in a grocery sack of prescription medications labeled “med failures.” (These are the same as listed previously.)

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A nurse's note on admission to inpatient unit stated the following: "wife: pt. has s/s OCD [obsessive compulsive disorder]. Emesis \times 3, none observed. BS + , BM -".

On day 3, the patient began to vomit immediately after IV dexamethasone was administered. The vomiting was never observed by staff. On day 4, the patient requested that the morphine be decreased. Basal rate was changed to 1.5 mg/hour. Pain level remained at 0/10. On day 4 also, the patient refused IV dexamethasone because of vomiting. Given the change in symptoms, he was re-evaluated for causes of vomiting. A bowel impaction was found, although he had had a normal stool 48 hours prior. Bowel impaction was manually removed. The next day the patient had constant nausea, with 300 cc emesis witnessed. On day 7, vomiting 1–2 times a day, he said, "these are the best days and nights I've had." Pain, however, was now 3/10 involving the right upper quadrant. Again, he was re-evaluated. Active normal bowel sounds were still present. Abdominal examination now showed five periumbilical masses, each 6 \times 6 cm, with ascites. The assessment was that pain was from tumor growth. Basal morphine rate was increased to 2 mg/hour. Medication for nausea/vomiting continued unchanged, as those symptoms were controlled. The patient's diet was general; he chose spaghetti and colas. There had been no reported nausea or vomiting for 48 hours.

By day 11, the patient expressed concern about pain control and sleep. He denied nausea but vomited unobserved 1400 cc. He was passing flatus. Physical examination was unchanged. The assessment was that pain was of tumor origin and was not controlled. Morphine CADD was increased to 3 mg/hour. The patient initiated discussion of, "how will this end, and when?" Options for palliative care, including palliative ileostomy, were again discussed. He chose no change in plan or management. He requested only pain control and control of nausea/vomiting.

By day 13, family had asked that dexamethasone in any form be discontinued because of his confusion. Vomiting had stopped with prochlorperazine. Nausea, however, had recurred.

At day 15, the patient reported pain at 2/10. Morphine was at 3 mg/hour basal. He had one emesis of 4000 cc, unobserved. He continued to pass flatus. He ate small bites throughout the day. The most bothersome symptom for him was nausea, not vomiting. Complete evaluation was done again. Physical examination was unchanged except for increasing weakness and confusion. He wanted the morphine decreased because pain was controlled. He agreed to dexamethasone 4 mg p.o. scheduled Q 6H, to morphine 1.5 mg/hour basal, and to prochlorperazine at 12.5 mg per rectum, scheduled.

On day 17, after 48 hours of no vomiting and no nausea, the patient had 150 cc emesis. Detailed review was performed again, from the beginning. Morphine had been increased to 2.7 mg/hour basal. Pain was 2/10 (acceptable 3/10). The patient reported 4–5 episodes of vomiting. His stated concern, however, was hiccups, which he controlled with peppermint.

At re-evaluation once again, the patient reported that the day before "was a bad day [with 4–5 episodes of vomiting]." He continued, "I have always been able to vomit. I put my fingers down my throat [indicating how with curved left hand]. I've done that a lot in the last few days. It relieves the abdominal distention." Physical examination was unchanged except for weight loss (83.9 kg). Bowel sounds were active and normal. The knuckles of the patient's hands had no calluses. There was no parotidomegaly. He continued eating half a sandwich at a sitting and walking in the halls and to the bathroom *ad libitum*.

Assessment was amended to include self-induced vomiting. The symptom of vomiting *was* controlled — by the patient, as a coping mechanism. The approach to vomiting was now one of support. Staff inquired about nausea/vomiting, noting amount and time of emesis, without further discussion. The patient continued to make choices about all interventions. Approximately every 48 hours an episode of vomiting occurred. Bowel function continued. The patient continued to eat bites of banana pudding, pineapple, and chicken broth.

On day 22, he denied nausea, vomiting, or pain. Weakness and confusion increased. He requested that all medications except morphine and phenobarbital (for sleep) be discontinued. He died peacefully on day 26.

DISCUSSION

Nausea and vomiting are common in palliative care. There are numerous publications on evaluation and treatment of nausea and vomiting (Abrahm & Fowler, 2009; Policzer, 2008). Origins can be the gastrointestinal tract; effects on chemoreceptor trigger zone; vestibular effect; or cortical sources, including metastases, anticipatory vomiting, and cognitive input. It is the cognitive input, self-induced vomiting, that is addressed here.

Literature search of "palliative care," "eating disorder," "psychophysiological disorders" (Ovid Medline® 1950 to February week 1 2010) yielded no reports of self-induced vomiting as an etiology of intractable vomiting.

Self-induced vomiting was not part of the differential diagnosis until the patient disclosed his practice. Two features point *away* from an eating disorder: gender and age. Eating disorders are more common

in females than males (10:1 ratio). Onset of eating disorders is typically at adolescence. About half of those with anorexic eating disorders recover during the next 10 years. For bulimic disorders, about half resolve in 5 years (Marcus, 2007). The patient was wrong gender, wrong age: male, age 50.

There were differences here from the “usual” refractory nausea and vomiting at end of life with an abdominal malignancy. First is the direct quotation in the home team notes: “I’m throwing up too much.” The implication is that he has a baseline, acceptable level of vomiting. Second, there was the mention of OCD to the admission nurse. Third, it is unusual that both social worker and chaplain services are declined. Fourth, the pattern of vomiting is uncommon. In 26 days of inpatient care, there are two episodes of vomiting that were witnessed by staff. There was no vomiting without basin or being in the bathroom. Also, antiemetics were effective for 48–96 hours; then the nausea and vomiting recurred.

“I’m throwing up too much.” Brotman writes that eating disorders may begin as a means of control but soon take on lives of their own. They become “almost addictive” in quality and then are employed as a response to all types of emotion. Vomiting is a compulsion “that neutralizes anxiety” (Brotman, 2001). Was his “. . . too much” statement a recognition that self-induced vomiting, one of his coping methods, was no longer working as his malignancy progressed?

Second is the entry regarding OCD. His observed behavior was in no way unusual. There were no observed rituals involving food intake or portions.

OCD is an anxiety disorder with a lifetime prevalence of 2–3% in the general population. OCD patients have an 8–12% risk of developing eating disorders. Incidence in the non-OCD population is 1% for anorexia and 4% for bulimia. (Kirkcaldy et al., 2004) Kirkcaldy continues that despite the prevalence of the disorder, the diagnosis is often unrecognized. Reasons for that are patients’ reluctance to seek help, the “mercurial” presentation of OCD, and comorbidities. Here, there was declination to meet with a social worker or chaplain or to engage staff emotionally. There was no observed unusual behavior. Often, the patient’s stated concern was not vomiting but hiccups or insomnia. And as comorbidity, he had a life-limiting abdominal malignancy.

To meet diagnostic criteria, the OCD compulsions must cause significant distress or impairment or consume more than 1 hour/day (Teng & Kosten, 2010). Vomiting was less his concern than the staff’s. He was focused on hiccups and insomnia. He then disclosed that vomiting was self-induced. He had been managing it for years. It was unlikely that there would be change in the last weeks of his life. The decision was made that attempts at intervention with

cognitive-behavioral therapy would be disruptive. Benzodiazepines, the other treatment modality, were already in liberal use to address anxiety.

Basic principles of palliative care include systematic symptom control, with a focus on psychosocial issues (O’Neill, et al., 1994). Third, as noted previously, the patient had declined services of social worker and chaplain. Minimal information was available.

Fourth is the pattern of vomiting. Medications controlled symptoms for 2–4 days, then abruptly failed. The patient was re-evaluated each time the clinical situation changed. On one occasion, inspissated stool was removed. Otherwise, there was no change in physical condition. Tachyphylaxis was considered and dismissed as an etiology of medication failure(s). Some medications were effective but were not acceptable to the patient. Ondansetron was effective, but the patient did not like the taste. Dexamethasone was effective, but the patient developed unobserved vomiting after it was given IV. Dexamethasone was effective p.o. It was discontinued because family felt it caused the patient confusion. His confusion did not clear after it was discontinued.

The pattern of vomiting shares characteristics of psychogenic vomiting described by Wruble et al. (1982). Psychogenic vomiting is chronic and episodic. It rarely occurs in the presence of others; it can be suppressed, if necessary “A significant number will often induce vomiting by placing a finger in the back of the throat.” Most can vomit and then return to eating. Half the patients do not have nausea. If they do, it does not keep them from eating. There is no specific “personality type.” Wruble’s series had no one with a physical etiology for vomiting. No one had abdominal pain.

Here, the implication at disclosure was that the patient had induced vomiting for years, demonstrating with his left hand how he did it. (His life partner confirmed after his death that the patient had induced vomiting since college.) He did vomit and return to eating. Clearly, he did have abdominal pain, with reason for it. Pain, however, was controlled.

SUMMARY

The palliative care team strives to control symptoms causing suffering. Nausea and vomiting are one of those symptom sets. In this case symptoms were controlled — by the patient. It appears that the vomiting became unmanageable for him as the malignancy progressed and as anxiety increased. Medication adjustment helped temporarily, ultimately failed, and the cycle began again. Had the disclosure occurred earlier, perhaps the underlying anxiety could have been addressed. Given the patient’s desire for privacy, that may not have been realistic. The disclosure

of self-induced vomiting relieved much staff tension. As the patient was controlling it, staff could not. To vomit or not was one of the few activities that he could control at the end of his life.

REFERENCES

- Abraham, J. & Folwer, B. (2009). Nausea, vomiting, and early satiety. In *Palliative Medicine*. Walsh, D. (ed), pp. 921–930. Philadelphia: Saunders Elsevier.
- Brotman, A.W. (2001). Eating disorders. In *Psychiatric Secrets*, 2nd ed. Jacobson, J.L. & Jacobson, A.M. (eds), pp. 137–142. Philadelphia: Hanley and Belfus.
- Kirkcaldy, R.D., Kim, T.J. & Carney, C.P. (2004). A somatoform variant of OCD: A case report of OCD presenting with persistent vomiting. *Primary Care Companion to Journal of Clinical Psychiatry*, 6, 195–198.
- Marcus, M. (2007). Eating disorders. In *Cecil's Medicine*, 23rd ed. Goldman, L. & Ausiello, D. (eds), pp. 1640–1642. Philadelphia: Saunders Elsevier.
- O'Neill, J. Crowther, T. & Sampson, G. (1994). A case study of anorexia nervosa: Palliative care of terminal psychiatric disease. *American Journal of Hospice and Palliative Care*, November/December, 36–38.
- Policzer, J.S., Sobel, J. & Storey, C.P. (eds). (2008). *Unipac 4: Management of Selected Non-Pain Symptoms of Life-Limiting Illness*, 3rd ed. Glenview, IL: American Academy of Hospice and Palliative Medicine.
- Teng, E.J. & Kosten, T.R. (2010). Anxiety disorders: Obsessive-compulsive disorder. In *Conn's Current Therapy 2010*. Bope, E.R., Rake, R.E. & Kellerman, R. (eds), pp. 113–1114. Philadelphia: Elsevier.
- Wruble, L.D., Rosenthal, R.H. & Webb, W.L. (1982). Psychogenic vomiting: A review. *American Journal of Gastroenterology*, 77, pp. 318–321.