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CASE REPORT

Coprophagia in a Young Child

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ABSTRACT

Coprophagia is a rare disorder in humans and a kind of pica ingestion. It is considered as an obsessive-compulsive disorder and found more in psychiatric hospitals among adult patients with dementia and diffuse brain disease. We report a pediatric case of coprophagia. The young boy was referred to Pediatric Gastroenterology unit for his feculent emesis. On an extensive and exhaustive workup which turned up normal and later on it was discovered that he was ingesting his stool followed by vomiting of same fecal matter.

Key Words: *Children, Coprophagia, Psychiatric patients*

INTRODUCTION

Coprophagia is eating of faeces and is considered a maladaptive behavior and usually seen in adults with severe mental retardation, schizophrenia, dementia and depression.¹ Coprophagia is a usual phenomenon in non-human primates but is very rare in humans and only documented in institutionalized patients.² It can lead to chronic infestation of intestinal parasites, hepatitis A virus infection, skin abscesses, airway obstruction, aspiration and sialadenitis.³

Coprophilia is the lust for faeces, a broader term used in psychiatry that includes plastering, finger painting with faeces, scatolia (meaning smearing of faeces on the hands and/or body) and coprophagia (the ingestion of fecal material). This maladaptive behavior is proposed to be related to atrophy of the medial temporal lobe which is similar to the Klüver–Bucy syndrome and hyperorality.⁴ We report a pediatric case of coprophagia who was successfully managed in a controlled environment.

CASE REPORT

A 10-year-old boy was referred to our Gastroenterology unit with feculent emesis for the

last 6 months. The frequency of vomiting was multiple per day, non-bilious, non-projectile and contained fecal material. Vomiting episodes were associated with constipation and moving bowels once a week for the last 6 months. He denied any abdominal pain, abdominal distension and any other systemic complaints. He had multiple visits to general pediatrician and short emergency admissions for these complaints but without any improvement. The past medical and family histories were insignificant and he was an average student of 5th grade. He belonged to a lower middle socioeconomic class and father was the only earning member and working on daily wages.

He was a well thriving child without any stigmata of any chronic diseases with normal orientation and mentation. The general physical and systemic examinations were unremarkable with normal centiles for age.

The workup done in last 6 months were all in the normal range including complete blood counts with peripheral smear, normal blood chemistries including electrolytes, bone profile, liver functions and renal function tests. Ultrasound abdomen and barium contrast studies were all normal in addition to computed tomography (CT) of abdomen.

The child was admitted to our Gastroenterology unit to perform his esophago-gastro-duodenoscopy (OGD) for any abnormal finding and presence of fecal matter. On the 1st day of admission, he did not vomit in the morning but at night he had two episodes of same feculent emesis which was observed by his mother but no one from hospital staff and neighboring patients. Next morning, the mother showed the vomit bag containing solid stools with some water and sputum. This was quite surprising. On 2nd day of admission, he had same feculent emesis in the evening when accompanied by mother to toilet. When he was examined he had fecal staining on his hands and teeth but the mother and patient denied any ingestion of stool material. Later on when he was restricted to a room and advised to use pampers for his defecation and urination, no episodes of any feculent vomiting happened.

He remained under direct observation by hospital staff for the remainder of his admission and had no episodes of emesis. The psychiatric team interviewed the patient and his mother in private and found that the father was imposing a lot of pressure on the child for high grades in his studies and thus that led to recurrent vomiting episodes. To make his illness more serious he started feculent emesis after ingestion of his own stools and mother was supporting him to escape from father's anger. In two week's time, the family and child were successfully counseled by the primary team and psychiatrist resulting in improvement in child behavior and no more emesis. His family especially father supported him very much. At follow up 4 months later, he is stable and did not have any such episode and was attending school regularly.

DISCUSSION

Coprophagia is a very rare disorder in humans and commonly seen in animals like dogs, rabbits and rodents. Animals like rabbits and rodents do it for nutritive purpose.⁵ In humans the etiology of coprophagia is uncertain. Joseph et al has reported coprophagia in elderly institutionalized patients and majority of them were female. Our case was school going male child who had a normal higher mental functions. In the medical literature, this disorder was linked to psychiatric conditions like schizoaffective disorders,

obsessive compulsive disorders (OCD) and depression.⁶ Our case had functional gastrointestinal disorder without any underlying organic cause.

Organic central nervous system abnormalities were detected in few patients with this condition like frontotemporal multiform glioblastoma and abnormal signal changes in amygdala. Our case did not have any clinical stigmata of any central nervous system (CNS) condition and his remarkable improvement after behavioral therapy was also against any need for neuroimaging.⁷ In fact, it is an understudied behavioral disorder in humans and we have only 1-2 case reports in the pediatric population.

The mainstay of treatment in coprophagia is behavioral therapy with psychosocial support for successful omission of the compulsive habit as we did it in our case. When it is associated with other disorders like schizophrenia, OCD, depression or seizure disorder then pharmacotherapy has been recommended, and several pharmacologic treatment modalities like selective serotonin reuptake inhibitors (SSRIs), antipsychotics and tricyclic antidepressants are in practice.⁸ The treatment of co-existing psychiatric illness should be part and parcel of behavioral therapy. Studies also report that relief from constipation and pruritus also have proven role in curing it.⁹

Coprophagia patients risk quality of life for both self and the caregivers. The patients usually deny coprophagia but in our case the boy accepted and unfolded the underlying reason. By having a socially non tolerable behavior such patients should always be treated with respect, patience and sympathy. The empathy is their supreme need and first step towards a qualitative daily regime, a breakthrough in their troubled minds and a possible way of treatment.

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REFERENCES

1. Sakamaki T. Coprophagia in wild bonobos (*Pan paniscus*) at Wamba in the democratic republic of Congo: a possibly adaptive strategy? *Primates* 2010; 51:87-90.
2. Ata T, Terada S, Yokota O, Ishihara T, Fujisawa Y, Sasaki K, et al. Wandering and fecal smearing in people with dementia. *International Psychogeriatrics* 2010; 22: 493-500.
3. Mahoney CJ, Beck J, Rohrer JD, et al. Frontotemporal dementia with the C9ORF72 hexanucleotide repeat expansion: clinical, neuroanatomical and neuropathological features. *Brain* 2012;135: 736-50.
4. Beck DA, Frohberg NR. Coprophagia in an elderly man: a case report and review of the literature. *Int J Psychiatry Med* 2005; 35: 417-27.
5. Josephs KA, Whitwell JL, Parisi JE, Lapid MI. Coprophagia in neurologic disorders. *Journal of Neurology* 2016; 263: 1008-14.
6. Ing DI, Roane HS, Veenstra RA. Functional analysis and treatment of Coprophagia. *J Appl Behav Anal* 2011; 44: 151-5.
7. Tsoucalas G, Bourelia S, Kalogirou V, Giatsiou S, Mavrogiannaki E, Gatos G, et al. End stage dementia spark of life: reliability and validity of the "GATOS" questionnaire. *Curr Alzheimer Res* 2015;12: 179-88.
8. Bacwic A, Martin K. Coprophagia in an 8 year old hospitalized patient. A case report and review of the literature. *Case rep in psychiatry* 2017;1-4. <https://doi.org/10.1155/2017/6565096>.
9. TR Sharma, BKavuru, M. Ali. Coprophagia and pica in individuals with mild to moderate dementia and mixed (iron deficiency and macrocytic) anemia. *Journal of the American Geriatrics Society* 2011; 59: 2381-3.