CASE REPORT

Encopresis in 11 Years Old Child with History of Congenital Anorectal Malformation: A Case Report

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ABSTRACT

Background: Non-organic encopresis is an elimination disorder characterized by the repeated passage of feces in inappropriate places in children older than four years of age without an underlying medical or neurological cause. Contributing factors include inconsistent or premature toilet training, family conflict, psychosocial stress, traumatic experiences, anxiety disorders, behavioral disorders, and impaired parent–child relationships. **Case:** An 11-year-old boy presented with persistent fecal incontinence since early childhood. He had a history of complex anorectal malformation, specifically anal atresia with a rectourethral fistula, and had undergone surgical intervention during the neonatal period. Clinical and radiological evaluations revealed no structural abnormalities. A history of prolonged diaper use, unsuccessful toilet training, chronic constipation with fecal retention, and psychosocial factors, including inadequate parental support and family-related stress which contributed to the development of maladaptive elimination behaviors. **Discussion:** Encopresis develops through multifactorial interactions, including prolonged postoperative diaper use, unsuccessful toilet training, maladaptive defecation behaviors, chronic constipation with fecal retention, and psychosocial factors such as inadequate parenting support and family stress. Chronic rectal distension due to fecal retention disrupts the defecation reflex and results in overflow incontinence, which is further reinforced by behavioral and psychological factors, including disgust toward feces and avoidance of toileting, potentially arising from unpleasant or painful defecation experiences. **Conclusion:** Non-organic encopresis is multifactorial in nature and requires a comprehensive multidisciplinary approach to achieve optimal clinical outcomes.

Keywords: Non-Organic Encopresis, Anorectal Malformation, Children

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INTRODUCTION

Non-organic encopresis, classified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) as an Elimination Disorder, is defined as the repeated passage of feces into inappropriate places, whether involuntary or voluntary, in a child with a chronological age or developmental level of at least four years, in the absence of an underlying medical or neurological condition. Encopresis is categorized into encopresis with constipation and fecal retention (functional/retentive) and encopresis without constipation (non-organic or non-retentive encopresis). Non-organic encopresis is characterized by the absence of structural abnormalities, neurological disorders, or organic gastrointestinal disease and is more commonly associated with psychosocial factors and impaired regulation of elimination behavior[1].

Globally, the overall prevalence of encopresis is estimated to range from 0.8% to 7.8% among school-aged children. Encopresis is more frequently reported in boys than in girls, with a male-to-female ratio of approximately 3:1. The highest prevalence is generally observed in children aged 5–6 years and subsequently declines with increasing age (e.g., 11–12 years), with reported rates of approximately 4.1% at ages 5–6 years and 1.6% at ages 11–12 years. Approximately 20% of children with fecal incontinence are categorized as having non-retentive fecal incontinence (without evident constipation), while the majority of cases are associated with retentive constipation. Epidemiological data in Indonesia remain limited; however, several clinical reports and regional studies suggest that elimination disorders, including non-organic encopresis, are still frequently encountered in pediatric and child psychiatric services, particularly among primary school–aged children, although they are often underdiagnosed due to underreporting and social stigma[2-5].

The DSM-5-TR diagnostic criteria for encopresis include at least one episode of fecal incontinence per month for a minimum duration of three months, a developmental age of at least four years, and the absence of physiological effects of substances or other medical conditions, except functional constipation. In non-organic encopresis, clinical evaluation does not reveal structural, metabolic, or neurological abnormalities that could account for the symptoms. Establishing the diagnosis requires a multidisciplinary approach, including developmental history taking, physical examination, and psychosocial assessment to exclude organic causes and to identify underlying precipitating factors[1].

Multiple studies indicate that the etiology of non-organic encopresis is multifactorial, involving interactions among biological, psychological, and environmental factors. Commonly reported factors include inconsistent or premature toilet training, family conflict, psychosocial stress, traumatic experiences, anxiety disorders, behavioral disorders, and parent–child relationship problems. Longitudinal research has also demonstrated that children with elimination disorders are at increased risk of emotional and behavioral problems, including low self-esteem and social withdrawal. Acute stressors, such as changes in the school environment, family conflict, or significant stressful events, often contribute to symptom exacerbation. The prevalence of non-organic encopresis is higher among children exposed to psychosocial stress or adverse life events, such as academic pressure or family-related stress, as well as among those from lower socioeconomic backgrounds and those with exposure to traumatic experiences[6-8].

Clinically, non-organic encopresis is significantly associated with morbidity. Physically, recurrent soiling increases the risk of perianal irritant/contact dermatitis, recurrent skin infections, and local irritation. Psychosocially, children with non-organic encopresis are more vulnerable to social stigma, reduced self-confidence, anxiety, academic difficulties, and impaired peer

relationships due to embarrassment or fear of incontinence episodes occurring at school or in public settings, which may negatively affect emotional development and social functioning. The prognosis is generally favorable when the condition is diagnosed early and managed comprehensively through educational, behavioral, and psychosocial interventions. However, delayed diagnosis and treatment may result in symptom persistence into adolescence, underscoring the importance of early recognition and intervention in clinical practice[2,9-11].

CASE

An 11-year-old boy was brought to the psychiatric outpatient clinic with complaints of repeated defecation outside the toilet. The symptoms had been present since early childhood. He was delivered via cesarean section due to placenta previa and was born with anal atresia. Surgical intervention was immediately performed by a pediatric surgeon. The patient was admitted to the neonatal intensive care unit (NICU) for 23 days. He had undergone a total of seven surgical procedures: two at RSUD Margono Soekarjo, two at Panti Rapih Hospital, one at Dr. Sardjito General Hospital, and two in Penang. The procedures included sigmoidostomy, posterior sagittal anorectoplasty (PSARP), fistula closure, re-sigmoidostomy, and redo PSARP, related to anorectal malformation with rectourethral fistula. The patient had also undergone stoma placement twice, with final stoma closure performed at the age of five years. Following the initial surgery, the patient was continuously placed in diapers by his parents, resulting in habitual urination and defecation in diapers. When he began attending school, his parents attempted toilet training; however, these efforts were not fully successful. The patient continued to experience enuresis and was unable to retain defecation, leading to continued diaper use until the age of 11 years. The patient reported awareness of his ability to urinate and defecate independently but expressed feelings of disgust toward his feces, which contributed to difficulty in establishing consistent toileting behavior.

The patient acknowledged that his persistent enuresis and fecal incontinence frequently resulted in verbal and physical reprimands from his parents. He described a lack of emotional closeness with them. His mother's business activities often required her to leave him in the care of a domestic helper, while his father worked outside Java and returned home irregularly. His two older siblings also lived away from home—one working in Batam and the other studying outside the region. Despite these circumstances, the patient did not report feelings of sadness, stating that he was still able to play with many friends.

Due to the persistence of maladaptive toileting behavior and continued diaper use, the patient was referred to a psychiatrist. After three outpatient psychiatric consultations, hospitalization was recommended.

The patient was admitted to Banyumas Regional General Hospital on December 8, 2025. His mother reported persistent enuresis and inability to retain defecation since early childhood, necessitating continuous diaper use. Although the patient was able to void and defecate independently, he demonstrated marked disgust toward feces, resulting in inconsistent toileting behavior. Evaluation of anal sphincter function, toilet training status, anxiety, and activities of daily living was deemed necessary. Abdominal radiography was within normal limits. The pediatric surgical team planned anal irrigation under general anesthesia following administration of a fleet enema the evening prior and the following morning. Nutritional assessment revealed severely underweight and severely stunted status with proportional weight-for-height z-score (WHZ), necessitating postoperative nutritional catch-up and growth and developmental monitoring by a pediatrician.

On the second day of hospitalization (December 9, 2025), the patient underwent

anal irrigation under general anesthesia. Fecaloma evacuation was performed via digital rectal examination followed by rectal irrigation until clearance was achieved. The patient was no longer wearing diapers and reported mild pain during defecation post-irrigation but stated that he was no longer afraid. During psychological counseling, he was communicative and reported limited openness in family relationships, as well as frequent physical and verbal violence from his parents. He admitted that defecating in his pants persisted due to habitual behavior and difficulty modifying this long-standing pattern.

On the third hospital day (December 10, 2025), the patient remained communicative and expressed willingness to engage in toilet training. He practiced defecating in the bathroom in the morning but continued to experience nocturnal enuresis. His mother, who attended the psychological session, acknowledged suboptimal parenting practices within the family.

On the fourth hospital day (December 11, 2025), the patient reported beginning to perceive the urge to defecate. His mother stated that he had been urinating and defecating in the toilet, although occasional minor soiling persisted. Episodes of enuresis had decreased. The surgical team recommended physiotherapy focusing on anal sphincter muscle strengthening.

On the fifth hospital day (December 12, 2025), the patient was able to defecate in the toilet, although minimal soiling remained. He demonstrated motivation to continue training. No further surgical interventions were planned. Continued behavioral therapy, including structured toilet training, was recommended following discharge.

DISCUSSSION

The patient had a history of anorectal malformation in the form of anal atresia with a rectourethral fistula and had undergone multiple surgical interventions since the neonatal period. Current abdominal radiological examination revealed findings within normal limits. This suggests that the persistent fecal incontinence cannot be fully attributed to residual structural abnormalities, but rather points toward functional impairment of the defecation mechanism. This condition is consistent with the concept of non-organic encopresis, in which behavioral factors and dysfunction of elimination control play a predominant role after the primary organic abnormalities have been surgically corrected[12].

The majority of non-organic encopresis cases are retentive in nature and are closely associated with chronic constipation resulting from stool withholding behavior. In this patient, prolonged postoperative diaper use, unsuccessful toilet training, and habitual defecation in diapers contributed to the development of maladaptive elimination patterns. Long-standing fecal retention leads to stool accumulation in the rectum, excessive water reabsorption, and chronic rectal distension, which in turn reduces sensitivity of the defecation reflex. Consequently, the physiological urge to defecate becomes blunted, reinforcing a recurrent cycle between constipation and impaired elimination control[13,14].

The presence of fecaloma requiring manual evacuation and rectal irrigation in this patient supports the mechanism of retentive encopresis with overflow incontinence. Chronic rectal distension may also decrease internal anal sphincter tone and responsiveness, further compromising defecation contro[9,15].

In addition to biological factors, psychological and environmental factors play a significant role in maintaining the elimination disorder in this patient. Feelings of disgust toward feces, unpleasant elimination experiences, and long-term dependence on diapers contributed to toileting avoidance behavior. In this context, stool withholding may evolve into a learned behavior, either consciously or unconsciously, as an attempt to avoid repeated negative sensations or experiences[16].

Suboptimal parenting practices, the presence of verbal and physical abuse from parents, and limited emotional closeness within the family further contributed to the persistence of symptoms. Psychosocial stressors, such as family conflict, are known to exacerbate non-organic encopresis and hinder the success of toilet training, and are frequently associated with difficulties in emotional and behavioral regulation in children[11,17].

CONCLUSION

Non-organic encopresis is defined as the repeated passage of feces into inappropriate places, whether involuntary or voluntary, in a child with a chronological age or developmental level of at least four years, in the absence of an underlying medical or neurological cause. In this case, the patient was an 11-year-old boy with a history of complex anorectal malformation, specifically anal atresia with rectourethral fistula, who had undergone multiple surgical interventions since the neonatal period and subsequently developed persistent elimination disorder in the form of encopresis extending into school age. Despite a history of significant organic abnormalities in early life, current clinical and radiological evaluations demonstrated no significant residual structural abnormalities. Therefore, the patient's fecal incontinence is more consistent with a diagnosis of retentive non-organic encopresis.

Encopresis in this patient developed through multifactorial interactions, including prolonged postoperative diaper use, unsuccessful toilet training, maladaptive defecation behavior, chronic constipation with fecal retention, and psychosocial factors such as inadequate parenting practices and exposure to family-related stress. Chronic rectal distension secondary to fecal retention resulted in impairment of the defecation reflex and the occurrence of overflow incontinence, further reinforced by behavioral and psychological factors, including disgust toward feces and toileting avoidance due to unpleasant or painful defecation experiences.

Clinical improvement was observed during hospitalization following fecaloma evacuation, rectal irrigation, psychological intervention, and structured toilet training education. This case underscores the importance of a multidisciplinary approach in the management of non-organic encopresis, particularly in patients with a history of anorectal malformations. Early diagnosis and comprehensive management addressing medical, behavioral, and psychological aspects, along with adequate family support, are essential to improving elimination control, preventing symptom persistence, and enhancing overall quality of life.

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CONFLICT OF INTEREST

This study has no conflict of interest.

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