

# Exploration on the Prevention of Pediatric Anorectal Diseases Based on the Theory of Shaoyang

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**Abstract:** *Purpose: Based on the Shaoyang doctrine in pediatric physique doctrine, to explore the influence of daily defecation habits and anal cleansing on the occurrence of pediatric anorectal diseases, with a view to reducing the incidence of anorectal diseases, and providing a basis for the prevention and treatment of anorectal diseases. Methods Using minors as the survey object, using the self-designed "Pediatric Anorectal Questionnaire," the main content included pediatric defecation habits, anal cleansing, and nursing habits, through a questionnaire survey and analysis of their collected data. Results: A total of 150 questionnaires were collected, with 152 valid questionnaires and 98.68% recovery efficiency. The results of the survey showed that there are still more pediatric patients with irregular defecation times, long defecation times, and frequent anal cleansing, which will lay a hidden danger for the occurrence of pediatric anorectal diseases. Conclusion The occurrence of pediatric anorectal diseases in China is closely related to defecation habits and daily anal care. We should actively publicize the correct and reasonable methods of defecation and anal cleansing, and guide pediatrics to develop good habits to prevent anorectal diseases from the source.*

**Keywords:** Pediatric constitution, Shaoyang doctrine, Anorectal diseases, Minors, Defecation habits, Anal cleansing, Incidence.

## 1. Background

Anorectal diseases have long plagued human health, and pediatric anorectal diseases have been on the rise in recent years [1]. Anorectal diseases occur in the anus and rectum, mainly including hemorrhoids, anal fissure, anal eczema, anal fistula, perianal abscess, and rectal mucosal prolapse; perianal abscess, anal fissure, anal fistula, and rectal polyp are the most common among the pediatric population. Children, especially younger ones, cannot still express themselves and rely on their guardians to help them defecate and clean up afterward. Due to the private and special location of the anus, current professional science, and publicity about this aspect of the little herd, most guardians only rely on personal experience care, improper cleaning, excessive cleaning, insufficient attention, or being too nervous. The results are often unsatisfactory, resulting in children suffering from anal and intestinal diseases and experiencing unnecessary pain. The skin of the anus is delicate and wrinkled, and it is easy to retain feces and secretions; therefore, it is difficult to achieve the purpose of cleaning by simple wiping, and over-cleaning damages the perianal skin barrier and destroys the bacterial flora [2]. Finding a balance between the two, not excessive cleaning to increase disease susceptibility but also to achieve the purpose of cleaning to better prevent the occurrence of anorectal diseases, is an urgent problem.

## 2. Overview of Pediatric Physique Doctrine

Pediatrics refers to the period from embryonic development to the end of puberty. Because individuals are in a constant process of growth and development during this period, they have different physical characteristics from those of adults. Physique is a relatively stable characteristic of an individual in terms of morphology, structure, and functional activity, and is formed by inborn genetics and acquired later in life. Children's physique is mainly "pure yang", "childish yin and childish yang", "the five viscera have more than enough", and "less yang" four kinds of statements, and the development of TCM pediatrics. Promote the development of Chinese

medicine-pediatrics. The doctrine of "pure yang" was first mentioned in the "Cranial fontanel scripture", highlighting the fact that "the pure yang of the child is not troublesome and is beneficial to fire." The doctrine of "childish yin and childish yang" was put forward by Wu Jutong, emphasizing that the yang of the child is the unfilled childish yang, and the doctrine of "pure yang" is in opposition to and united with the doctrine of "lesser yang", emphasizing the balance of yin and yang in which yang is dominant. The balance of yin and yang is emphasized by the predominance of yang. The five viscera have surplus and deficit refers to the five viscera of children with the heart; the liver often has surplus, lungs, spleen, and kidneys are insufficient, from the clinical application to summarize the children's viscera "into but not yet complete," "full but not yet strong" characteristics [3].

## 3. The Origin and Development of the Shaoyang Doctrine

Shaoyang doctrine originated from the "Yellow Emperor's Classic of Internal Medicine" in the doctrine of yin and yang, perfected in Zhang Zhongjing's "Treatise on Typhoid Fever", and then matured in the Ming Dynasty Wanquan's "Secret of Infant Raising". Wang Bing said: "Yang Qi is not too, so it is called Shaoyang." The pediatric "body endowed with less yang" doctrine originated in the Ming dynasty Wan Mizai, he is the "baby tips - the five organs of the Department of the evidence" in the cloud: "spring is less yang gas, the reason why everything happens also. The child is born said buds, said as the buds of grass and trees, by the gas is born, the gas is full, but also the gas of the lesser yang has not been long." The child's vitality is characterized as a metaphor for the square buds of grass and trees, and the rising sun of the east. Cranial fontanel scripture pointed out: "all children under three years of age called for pure yang, yuan qi is not dispersed," revealing that the child's rapid development, vitality and vigor as if the rising sun of the firstborn. Pure yang and manifested in the pediatric Yang often have more, yin is often insufficient, the formation of the nutritional needs of large and relatively insufficient grain gas internal contradiction. Expressed as a

child after evil easily transforms into a fever, the repair of internal organs and tissues is strong and easy to recover.

#### 4. Connotation of "Shao-Yang Doctrine" - Dynamic Yin-Yang Balance

According to Prof. Zheng Qizhong, the "Shaoyang Doctrine" means that the balance of yin and yang in the pediatric period is a dynamic balance of yin and yang, a balance of yin and yang in which yang is predominant, and a balance of yin and yang that is in a state of constant development and change. The pediatric body is endowed with less yang, yang qi is gradually strong, tendons and bones are gradually strong, wisdom is gradually growing, diet is gradually complete, the function of internal organs is gradually perfected and mature, and yang qi is in a dominant position. Medicine Zhongshenxi Lu" mentioned: "children for the body of the lesser yang, in the spring, spring solid rising also, in the five elements of wood, wood like upwardly mobile also. " It can be seen that the Shaoyang both the nature of the wood with, and embodies the "change", rising, perfect, so the Shaoyang refers to the tender, spring sun, carrying the first gas of all things, the light and clear up to the nature of the balance of yin and yang body. It does not refer to pure yang without yin, and a single yang is not born, and a single yin is not long. The Spiritual Pivot - this loss" cloud: "Shaoyang belongs to the kidneys. " The kidney, the true yin and yang is the main bone marrow. Children's growth and development are fundamental in the kidneys, liver, and gallbladder. The liver and gallbladder are wood, the spring is connected, and the spring is the time when everything is recovering and growing. Pediatric growth and development are rapid, similar to a vibrant thriving spring. Children's growth and development depend on the development of yang qi, and in the infantile yin and yang, but also to "Yang" rise as the dominant trend to drive the "yin and Jin" continue to grow, so that it is a dynamic balance of yin and yang. Children's growth and development rely on Yang to birth, according to the Yin to grow, there is often Yang often has more than enough, and yin is often insufficient, so the growth and development may appear sometimes fast and sometimes slow unbalanced state. It is necessary for "Shaoyang" to play a pivotal role in regulating the balance of yin and yang to maintain its normal development. Su Wen - Anger through the sky theory" cloud: "yin and yang secret, the spirit is cured. When the yin and yang are separated, the essence is destroyed. " This explains the importance of yin and yang for human growth and development. Suwen - yin and yang should be like a great theory of the cloud: "Yin within the guard of the Yang also, Yang in the outside of the Yin of the make also. " The unique relationship between yin and yang is also illustrated by the fact that yin and yang are mutually supporting and utilizing each other.

#### 5. Clinical Value of the "Shaoyang Doctrine"

According to Liu Bichen, children's bodies are endowed with less yang, and the liver often has a surplus, which can easily produce fire and wind and help to produce phlegm [4]. Fully understanding the pediatric constitution and improving the state of the pediatric constitution can reduce the occurrence of disease, and its application in pediatric patients is particularly important. The "doctrine of the young yang" emphasizes that children's yang is predominant and tender, compared with the

yin, which is insufficient, so children are more susceptible to disease. They are susceptible to external and internal injuries caused by breastfeeding, and once they fall ill, their condition spreads rapidly. The physiological and pathological characteristics of children determine the uniqueness of their physique; therefore, it is important to correctly understand the characteristics of the pediatric physique, focus on the treatment, formulate a targeted regimen, improve the biased physique, and improve the therapeutic effect of the disease, and it is important for the treatment and prevention of pediatric diseases [5]. Li Luyao [6] believes that different physiques are susceptible to different disease tendencies, and should start from the four aspects of diet, sleep, exercise, and medication when necessary, to comply with the susceptibility, variability, and plasticity characteristics of the pediatric physique, to achieve the ultimate goal of the overall health of the pediatric population and active health. Based on this, the cleansing care of the pediatric anal area should achieve the purpose of cleaning, but at the same time, should not intervene excessively to break the balance of the perianal skin itself. Common anal and intestinal diseases in children mainly include perianal abscess, anal fissure, anal fistula, rectal polyps, etc., of which perianal abscess and anal fissure are the most common, so the following is mainly to explore these two diseases. Perianal abscess is most common in artificially fed infants. Before the disease, the child has a history of diarrhea or constipation, and the main manifestations are crying redness and swelling of the perianal skin. The skin temperature can be elevated, ulceration of the pain is slightly relieved, and in severe cases, it can be accompanied by systemic symptoms. If not treated properly or delayed, it may form a fistula and repeat infection. The etiology and pathogenesis of TCM are mainly divided into two aspects: fetal toxicity and spleen deficiency [7]. Children's disease is mostly fetal toxicity; fetal toxicity is not clear, dampness and heat within the ambush, and exogenous dampness and heat, dampness and heat with the blood to the lower burner, embedded in the anus, meridian blockage, heat, and meat rot. Pediatric spleen qi deficiency and spleen yang insufficiency lead to wetting that cannot be transformed, embedded in the body, but also because the child for a body of pure yang, so more fever, wet and heat knot, injection into the anus, hair for abscesses, and anal fistula [8]. Western medicine believes that it is mainly associated with increased androgen, immune factors, intestinal flora dysbiosis, special anatomical structures, and improper care. The infection mostly comes from the anorectal wall; neonates or infants with short anal canal; the mucosa of the anorectal canal is easily ectroped during bowel movement, coupled with the delicate skin, the ectropion of the mucosa, and the perianal skin is easily abraded, leading to bacterial invasion of the rectal submucosa and perianal subcutaneous, ultimately causing an abscess or subcutaneous abscess in the perianal-rectal space. Anal fissures are also one of the most common anorectal diseases in children. It is mainly characterized by severe pain and crying during defecation accompanied by different degrees of bleeding. The etiology and pathogenesis of anal fissures are also presented in the Medical Zong Jin Jian - Surgical Heart Method Essentials: "The anus is surrounded by, the folds are ruptured, and the stool is knotted, and the fire is dry" [9]. It is caused by pediatric constipation, resulting in coarse, hard, and dry feces, and the dry, hard feces rubs the epithelium of the anal canal when angrily blaming defecation is formed. After

suffering from anal fissures, the pediatric patient suffers from pain during defecation and blood in the stool and does not defecate because of the pain, which leads to even drier feces, forming a vicious cycle.

## 6. Data and Methods

### 6.1 General Information

This study was conducted from April 2024 to August 2024, mainly in the form of online questionnaires administered to 150 parents or pediatricians. Firstly, the purpose and method of this survey were explained to the respondents and their families, and their close cooperation was obtained, and then the QR code was scanned to fill in the online questionnaire, and all the questions were single-selected, and individual invalid answer sheets were deleted in the statistical process. The survey was a cross-sectional study of underage anorectal disease, all of which obtained informed consent from the subjects, and the ethical standards followed were approved by the relevant ethics committees.

### 6.2 Research Methods

The self-designed "pediatric anorectal questionnaire" was used, and the main contents included: (1) pediatric defecation habits, such as casual frequency, time of defecation, frequency of defecation, attention to defecation, and the use of corkscrews; and (2) pediatric anal cleansing, such as anal cleansing frequency, cleansing substances, and choice of wipes. A total of 28 questions were used, all of which were single-choice.

### 6.3 Observation Items and Determination Criteria

Questionnaires were returned to analyze pediatric defecation habits and anal cleansing care.

## 7. Results

A total of 152 questionnaires were collected, with 150 valid questionnaires and a 98.68% recovery efficiency. Most pediatricians and guardians still pay insufficient attention to defecation habits and anal cleansing, and there are a relatively large number of pediatric patients with irregular defecation time, long defecation time, and frequent anal cleansing.

## 8. Discussion

Questionnaires were administered to 91 boys (60.67%) and 59 girls (39.33%). It is broadly categorized into defecation and cleaning habits. The results of the survey showed that 86.67% of the children would defecate at home, only 13.33% of the children would choose to defecate at school, and even 34.67% of the children did not choose to defecate at school when they had the urge to defecate, the reasons for this were that 25% of the children thought that the school toilets were unhygienic, 23.08% due to the lack of time, and 13.46% because they did not know how to wipe the buttocks and 3.85% due to the lack of conditions for washing the buttocks. Conditions. Regarding the time of defecation, 37.33% of the children did not have regular defecation time, 28.67% defecated in the morning, 25.33% defecated at night, and 8.67% defecated in the middle

of the day. Regarding the frequency of defecation, 67.33% of the children defecated once a day, and 18.67% defecated twice a day. Regarding the duration of each bowel movement, 36% of the children defecated for 1-3 minutes, 33.33% for 3-5 minutes, 14.67% for 5-10 minutes, 9.33% for less than one minute, and 9.33% for more than ten minutes. Regarding defecation concentration, 59.33% of children never looked at their cell phones, 30% occasionally looked at their cell phones, and 10.67% often looked at their cell phones while toileting. Developing good defecation habits is a key factor in preventing the occurrence of anorectal diseases [10], bad habits, such as playing, looking at cell phones, and reading books during defecation will distract the attention, and the resulting bad habits such as holding the bowel may cause the feces to be retained in the colon for too long a period. The colon will over-absorb the water, and the bowel will become dry and thick, triggering the occurrence of anorectal diseases; therefore, it is desirable to make the time of defecation shorter rather than longer. Zeng Yinzhen [11] believes that the family history of constipation, picky eating, allergies, preferring to eat spicy and stimulating food pediatric constipation risk factors; prolonged breastfeeding, increased amount of water and physical activity, receiving toilet training, developing a good bowel movement, eating coarse grains is a protective factor for the occurrence of constipation in the pediatric population. The anus and rectum store and excrete feces; feces contain many bacteria, and anal contamination by bacteria can easily induce a variety of diseases; therefore, cleaning should not be ignored. Regarding the frequency of anal cleaning in the survey results, 51.81% of the children wash their buttocks once in two days, 12.06% wash once a day, 2.41% will wash twice a day, and the rest have no fixed time. Regarding wiping the anus, 64.67% of the pediatric patients opted for hygienic tissue, 21.33% opted for wet wipes, and 6% opted for disinfectant wipes. Healthy children choose to use ordinary warm water to achieve the purpose of cleaning, the frequency of once a day can be, such as feeling anal moisture discomfort can be cleaned at any time, and keeping the local dry.

Infants and young children with anorectal and adult diseases have obvious differences, and the child's age is small; it is difficult to tell the symptoms of the anus, usually with crying, refusing to eat, etc. . Infants and young children have delicate skin, easily due to stool soaking, coarse and hard diaper friction, and rough hand brown damage, leading to anorectal diseases. The following aspects: (1) Usually, attention should be paid to the local cleanliness and dryness. Change diapers in time, do not wear diapers for a long time to prevent the appearance of skin flushing, ulceration, or infection. After defecation, the anus was cleaned with warm water. (2) Establishing good defecation habits. Instructing children to fix the time every day, and develop the habit of defecating on time, reflexive defecation on time is regular defecation, and can effectively prevent constipation. Through psychological guidance and defecation habit training, to realize the children's self-care and physical function improvement, can improve the clinical efficacy and quality of life [12]. Children sometimes cannot urinate and defecate and thus contaminate clothes and pants, and other unavoidable phenomena, as parents should not be too blamed, and should help children build confidence and develop good defecation habits. Stay focused, do not sit on the potty for a long time to read or play. (3) Prevent diarrhea and constipation. Diarrhea and

constipation are the most common triggers of anorectal disease in children. Attention should be paid to dietary hygiene and avoiding eating unclean or spoiled food. If there was gastrointestinal discomfort, consult a doctor on time. (4) Adopt good dietary habits. Drink more water and eat more fruit and vegetables. Prevent anal fissures due to dry stools. (5) Pay attention to potty hygiene. A prolonged failure to clean the bedpan may cause bacterial infections.

## 9. Summary

From the data collected, there were still some parents who had misconceptions about children's defecation habits and anal cleansing care. Habits formed in childhood usually remain with a person throughout their life, and it is difficult to change or correct them in adulthood. Therefore, guardians need to provide timely and correct guidance to avoid adverse factors that may lead to the occurrence of anorectal diseases. Pediatric anorectal disease occurs and is associated with a variety of factors. For most healthy people, daily habits are often the best means of intervention. We should pay attention to the usual defecation and anal care situation, healthcare professionals by strengthening publicity and education, and guardians actively learn scientific knowledge and jointly promote the pediatric population to develop good habits and behaviors to reduce and prevent anorectal disease. This survey still has shortcomings: the number of collections is limited, there is a lack of data on children who suffer from anorectal diseases, and there may be bias in the data. Most of the recipients were children and their families who came to Xi'an Hospital of Traditional Chinese Medicine, which is a general hospital and lacks the targeting of special populations of children.

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