**Viewpoints of Traditional Iranian Medicine (TIM) about Etiology of Pediatric Constipation**

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**Abstract**

**Introduction:**
Constipation in children is a common health problem affecting 0.7% to 29.6% children across the world. Exact etiology for developing symptoms is not clear in children and the majority is considered to have functional constipation. Alteration of rectal and pelvic floor function through the brain-gut axis seems to play a crucial role in the etiology. The diagnosis is often a symptom-based clinical process. Recently developed Rome III diagnostic criteria looks promising, both in clinical and research fields. Laboratory investigations such as barium enema, colonoscopy, anorectal manometry and colonic transit studies are rarely indicated except in those who do not respond to standard management. Treatment of childhood constipation involves several facets including education and demystification, toilet training, rational use of laxatives for disimpaction and maintenance and regular follow-up. Surgical options should be considered only when medical therapy fails in long standing constipation. Complementary and alternative medical therapies and practices are widely employed in the treatment of the children Constipation. This article aims to be a practical guide for paediatricians and primary care physicians, to outline the current etiology and TIM for the medical management of constipation in children.

**Keywords:**
Children Constipation, Etiology, Iranian Traditional Medicine.

**Introduction**

Constipation is a very common presentation, both in primary and secondary care. Prevalence of functional constipation in children ranges from 4-36% (1-3). In the hospital setting, paediatric constipation forms 3% of all referrals to paediatric practice and up to 25% to paediatric gastroenterologists. In addition a recent American study suggests that there is a cost of health resources for children with constipation, estimated at $3.9 billion/year (4). This article aims to be a practical guide for paediatricians and primary care physicians, to outline the current etiology and TIM for the medical management of constipation in children.

**Materials and Methods**

This article is a review of major sources of conventional medicine and traditional medicine in Iran in different Centuries as cannon, Al-Igraz Al-Tibbieh and Al-Mabahis Al-Alaieh, Axir Azam, Sharhe-Asbab, Akbari medicine and Kholasat-alkhmaa.
Constipation with different titles of these books were extracted and then classified.

**Complementary and Alternative Medicine (CAM):**
CAM therapies have become increasingly popular in pediatric populations. Yet, little is known about children’s preferences for CAM. Several studies have reported estimated rates of CAM use in various pediatric populations (5-7). However, these estimates vary widely from as low as 2% in the general pediatric population (8) to as high as 73% in a sample of children with cancer (9). Complementary and alternative medicine (CAM) is defined as “A group of diverse medical and health care systems, practices, and products that are not generally considered to be part of conventional medicine” (10). Parents/patients frequently ask health care professionals about CAM therapies; however, many feel uncomfortable advising patients and desire further knowledge regarding CAM therapies (11-12). The American Academy of Pediatrics Provisional Section of Complementary, Holistic, and Integrative Medicine, the Task Force on Complementary and Alternative Medicine, stated: “Pediatricians and other clinicians who care for children have the responsibility to advise and counsel patients and families about relevant, safe, effective, and age-appropriate health services and therapies regardless of whether they are considered mainstream or CAM” (13).

**Modern Western Medicine (Conventional Medicine):**
Definition: The wide variation in normal defaecation patterns in children discussed above makes it difficult to define constipation. Normal ranges also vary with age and place of residence (14). Functional constipation has been defined by the ROME III classification as 2 or more of the following features in a child with a developmental age of at least 4 years and occurring at least once per week for at least 2 months before diagnosis (with insufficient criteria for diagnosis of irritable bowel syndrome) (15).
- 2 or fewer defaecations in the toilet per week
- At least 1 episode of faecal incontinence per week
- History of retentive posturing or excessive volitional stool retention
- History of painful or hard bowel movements
- Presence of a large faecal mass in the rectum
- History of large diameter stools that may obstruct the toilet

**What is Iranian Traditional Medicine (TIM)?**
Iranian traditional medicine system is based on holistic approach and not limited to the treatment of illness, but is considered a way of life. Mizaj (Temperament) and Akhlat (Khelt, humour) are two of the most important canons of Iranian traditional medicine system. Humors in the human body: "Phlegm or Balgham, Blood or Dam, Safra and Sauda". Each of the humors was related with pairs of qualities including cold and wet, hot and wet, hot and dry, and cold and dry, respectively. The imbalance in body temperament and humors leads to the onset of disease condition as it was previously mentioned. Therefore, treatment is based on the correction of temperament and humors to achieve a balanced state. Every humor has a specific temperament as described earlier. So, the drug used for the treatment should possess the opposite temperament than that of the diseased humor, resulting in normalization of the temperament. A disease, which is cold in nature, can be cured by a drug, which has hot temperament and so on. It should be noted that not all the diseases in the TIM are treated based on the temperaments and Distemperaments (Sui' e Mizaj, distortion of the temperament of a single organ up to the whole body). The Distemperaments are the ones mostly treated by correction of temperament and the two latter are mostly treated by special drugs or manipulation.
especially including surgery. The sign and symptoms of the dystemperament (Sui’ a Mizaj) of the main digestive organs (Stomach and liver) were obtained. Symptoms which according to them the medical history was taken, were derived from the traditional diagnostic and treatment books. Abnormal Humour Production Results in ibs According the book "The Qanon of Medicine" (by Avicenna), the foundation of Iranian traditional medicine system was based on the balancing humors in the human body.

**Physiology of Defecation in the Perspective of TIM**

Normal human stool should have the following features:
- Appearance must be convened and similar in parts.
- It should be normal in: Quantity: it means stool compared with the food, not less, not more in weight.
- Color: it should be light yellow and if only colored food is not taken. Fecal odor: Neither bad smell nor odorless. Consistency: stool is neither very thick nor too loose (as consistency of honey). Time of defecation: Fecal excretion should be 12-24 hours after eating food.
- Defecation should be autonomic and be done easily.
- It should be without racing and acuity.
- Abdomen should be without borborygmi and gargling.
- Stool should be similar to food in quantity and volume.
- Stool shouldn’t have foams.

**TIM and Definition of Constipation**

“Constipation” in the traditional medicine books is known as “abdominal block”. constipation is defined in three items: The quantity: In constipation, the stool volume is less than the volume of food. Consistency: Stool is firm and dry. Time: It is occurred more than 12-24 hours.

**Etiology of Constipation**

1) **External Causes:**
- Nutritional factors:
  - Eating dry foods and fruits like corn, rice, dried bread, banana.
  - Using drugs with a dry-temperament, Opiates and diuretics.
  - Eating low amounts of food
  - dehydration factors:
  - Extreme hot weather
  - Extreme sports
  - long time in the hot bathroom

2) **Internal Causes:**
2a) Distemperaments (Sui’ e Mizaj)
  - Dry intemperament of the bowel (Functional)
  - Excessive Cold intemperament of the bowel (Functional).
  - Hot intemperament of the bowel (Functional).
  - Hot intemperament of liver, kidney, Gallbladder, body (Functional)
  - Hot intemperament of the abdomen because of yellow bile high flow (Functional)
2b) Long time stool stay in the intestine
  - Lack of enough bile secretion
  - Abdominal sphincter muscle weakness
  - Weak repulsive force in the intestines (Chronic intestinal pseudo-obstruction)
  - No sense in the intestine (Using drugs Opiates)

3) **Other Causes:**
- Water passing through diuresis or severe diarrhea can cause dryness in the body
- The presence of parasitic worms
- Intense wind in intestines
- urination increase(no use diuretic)
- Intestine weakness
- Loss of body moisture (16 -25).

**Conclusions**

Our study suggests that TIM is widely used among children in Iran. Medical doctors should actively discuss the use of TIM therapies with their patients and provide information on the safety and efficacy of diverse TIM modalities to guide the choices of TIMM users. TIM physicians in the history of medicine believed that eradication of the major causes of the sickness is necessary to complete treatment of diseases. First step of the treatment is change in life
style and second step is herbal drug therapy. So, by reviewing of the causes of constipation, in many cases we would definitely treat it by changing in life style and etiologies (For example changing in diet, environment, work house).

References
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