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A CASE STUDY OF ACUTE DIARRHEA IN CHILDREN AND ITS AYURVEDIC MANAGEMENT

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ABSTRACT

Although advance in public health and hygiene level led to the virtual disappearance of acute diarrhea in children for much of the developed world, the disease remains endemic in many developing countries.[1] The most frequent cause of acute diarrhea are gastrointestinal infection, viral and bacterial and rarely parasite. The infections are spread by fecal-oral transmission, i.e. contaminated food and water or direct or indirect contact with an infected individual. Although the source of infection transmission through poor hygiene and sewage contamination of water supply.[2] Acute diarrhea accounts for 30% of hospital admissions and 15% Death under 5 children with an estimated incidence of 1.7 episodes/Year/Child.

KEYWORDS: Acute diarrhea, atisaar.

INTRODUCTION

Acute diarrhea is the most frequent gastrointestinal disorder and the main cause is dehydration in diarrhea in childhood. It is characterized by a sudden occurrence of three or more watery or loose stool daily.

Atisaar is classified along with the atisaar. Atisaar further divided into vaataj, pittaj, kaphaj, sannipataj, shokaj and aamaj by madhav nidan and aacharya sushrut.

"guden bahudravsaran atisaaram…."

That is another definition of atisaar.[3]

PATHOLOGY

Particularly high contagiousness show rotavirus, norovirus and Shigella. Viral causes of acute diarrhea, in addition to the classical manner, can be spread through aerogenic transmissions. Prevalence of specific intestinal pathogens is age-related but it also depends on the stage of development of the child's surroundings.

Particularly at the age range from six months to five years, are viruses (rotavirus, norovirus, adenovirus, calicivirus, astrovirus and others), while bacterial causes of the disease (Campylobacter jejuni, Salmonella, Shigella and pathogenic species of Escherichia coli), which primarily affect children in the first six months after birth and after five years of age, are much rarer.[1,2] Giardia lamblia, Entamoeba histolytica and Cryptosporidium. In addition to gastrointestinal infections, acute diarrheal disorders are caused by alimentary intoxications, wide-spectrum antibiotics, oral iron preparations, laxatives, cytostatics, gastric secretion suppressors, stress related conditions and severe extra intestinal infections in infancy period, such as sepsis, urinary tract infection, otitis media, pneumonia and other.[1] It is necessary to point out that a prolonged usage of wide-spectrum antibiotics even in children, particularly those with chronic inflammatory intestinal diseases and malignancies, can cause most severe Clostridium difficile (pseudomembranous) enterocolitis. Infectious causes of acute diarrheal disorder colonize the small bowel and/or the large bowel. Viral infection affects only the small bowel causing invasion and destruction of the mature epithelium, while bacteria and parasites, depending on the type, exert their pathogenic effect in both bowel segments. From the pathogenetic point of view, infectious diarrheal disorders are classified into three basic groups, i.e. secretory, osmotic-secretory and exudative-secretory. Secretory diarrhea is caused by Vibrio cholerae and toxigenic strains of E. coli, osmotic-secretory by viruses, and exudative-secretory by entero invasive bacteria (Salmonella, Shigella, Campylobacter) and Entamoeba histolytica. Accordingly, osmotic and osmotic secretory diarrhea is characterized by liquid stools, and exudative-secretory by aqueous-mucilaginous and often blood-stained stools. Entero pathogenic E. coli, Giardia lamblia and Cryptosporidium adhere to mucosal surface of the proximal small bowel, thus, by compromising its function, primarily causing a mal absorptive form of diarrheal disorder. Alimentary intoxications are characterized by a secretory diarrheal disorder caused by the ingestion of food contaminated by enterotoxins of Staphylococcus aureus, Clostridium perfringens and Bacillus cereus. Contrary to infections, there is no bacterial colonization of bowls. Staphylococcus aureus excretes a thermo stabile, while Clostridium perfringens and Bacillus cereus excrete a thermo labile enterotoxin.

Diarrhea, as a component of antibiotic therapy occurs as the consequence of the disintegration of colonic bacterial flora. The most severe disorder of this type is Clostridium difficile enterocolitis. Erythromycin, azithromycin and other macrolides, except for antibiotic effect, also act stimulatively on the gastrointestinal motility, thus it is not rare that their application is followed by feelings of nausea, vomiting, abdominal pain and diarrhea. Other medications cause a diarrheal disorder by various mechanisms – oral iron preparations by irritative (pro oxidative) effect, purgatives by laxative, chemotherapeutics by cytotoxic, gastric secretion suppressors (proton pump inhibitors and H2 blockers) by prokinetics, etc. Stress conditions disturb vegetative body function, including the gastrointestinal motility and secretion, which constitute the bases for diarrheal episodes in persons with irritable bowel syndrome.[1,2]

CASE STUDY

A 5 yrs old male pt. no any chronic illness, having 7 to 8 loose watery stool since last one day with abdominal pain, bodyache and headache, consulted in out pt. department.

CLINICAL FINDINGS

Pt. is having watery loose motions since last one day with severe abdominal pain, bodyache, headache and general weakness, vomiting 5-7 episodes, loss of appetite.

Bodyweight is 16 kg.

Basic complication of acute diarrhea has seen is dehydration developing due to diarrhea. Acc to severity it was mild. (degree of dehydration equivalent to electrolyte deficit, most children diarrheal dehydration is isonatremic 85% and much rare hypernatremic 5-15 % and hyponatremic 5-10 %.

Second most complication has seen in loss of body weight.

TREATMENT

1. Kutaj avaleh- 10 -20 gms - TDS
2. Patha churna with madha chatan – 3gm- TDS
3. ORS sachet - BD
4. Langhan for first 12 hr then start soft diet daal, rice and ghee.

OBSERVATION

SYPTOMS	BEFORE	AFTER
LOOSE MOTIONS	+++	-
ABDOMINAL PAIN	+++	-
LOSS OF APPETITE	+++	+
BODYACHE	+++	-
G. WEAKNESS	+++	+
VOMITTING	+++	-

DISCUSSION

LANGHAN and above drug help to reduced AAM in body, eventually decrease the agnimadyata which helps to improve appetite, kutaj avleh and patha churna helps to cure vaatprakop, increase dipan and apadhatu pachan process.[4]

ORAL REHYDRATION

Rehydration by natural (oral) route is based on the active sodium-glucose co transport. Intake of ORSs, composed of a determined combination of sodium, glucose, potassium and bicarbonate or citrate, begins immediately after the appearance of diarrhea and is continued until a complete normalization of digestive functions. To prevent dehydration, either initially or after oral, an ORS is administered at a rate of 10 ml/kg BW after each watery stool, while to correct moderately severe dehydration the administered dose is 100 ml/kg BW and for mild 50 ml/kg BW over a course of three to four hours. An ORS is administered in frequent and small sips using a small spoon, bottle or cup. It can be also given through the nasogastric tube. Therapy is applied under both hospital and home conditions. By adhering to the above mentioned principles. The composition of the preparation is adopted to this region pathogenesis of diarrheal disorder and it fully corresponds to the guidelines of WHO. Finally, it should be pointed out that the compensation of water and electrolyte loss in patients with acute diarrheal disorder with drinking. water, sweetened tea, fruit juices and other drinks, 5% or 10% glucose, physiological solution and similar means have no physiological basis and therefore cannot produce adequate results.[5]

CONCLUSION

The ayurvedic diagnosis of " atisaar" is made for diarrhea in present case. Various ayurvedic internal medicines have provided promising result especially in reducing loose motions without any side effects.

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