Bonnisan in Gastrointestinal Disturbances in Infants and Young Children

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INTRODUCTION

Gastrointestinal disorders are one of the commonest problems, of great concern to the parents and doctors caring for infants and young children. Although a large group of these disorders comprise various infections and infestations of the gastrointestinal tract, an equal number of problems are due to the so-called minor gastrointestinal upsets which occur frequently and are a matter of grave concern in neonates and infants, as their exact etiopathogenesis is not clear. A child is born with anatomically perfect gastrointestinal system, but physiological maturity is acquired gradually, in months and perhaps years after birth, as individual variations are always there. This physiological immaturity coupled with poor intestinal motility and immaturity of liver functions gives rise to intestinal upsets which reflect in poor growth and development of the child. Due to these frequently occurring gastrointestinal problems, parents and doctors get confused and keep changing milk, or use antispasmodics and various enzymes which do not really work. As a result, the child gradually begins to lose weight.

A formula which is simple, palatable and would relieve gases, colics and at the same time stimulate digestion, absorption and stimulate liver enzymes, would be an ideal remedy for these problems. Bonnisan has been promoted as such a remedy. It has been studied by various workers and is proved as an appetite stimulant, growth promoter¹ and a very good carminative. This view has been thoroughly investigated from various angles by a number of workers³⁻⁵. Bonnisan contains Dill oil, ingredients of Liv.52, extracts of *Tinospora cordifolia, Piper longum, Phyllanthus emblica, Elettaria cardamomum, Tribulus terrestris* and *Boerhaavia diffusa* processed in the fresh juices and decoctions of various digestive and hepatic stimulants.

MATERIAL AND METHODS

This study was conducted at Sir Padampat Mother and Child Health Institute, Jaipur. One hundred and fifty newborns and infants up to 3 years of age, suffering from gastrointestinal problems of various types and not receiving any other medication, were taken up for the purpose of this study.

Table I: Dosage schedule							
Sl. No.	Age group in months	Bonnisan in t.s.f.	Frequency/day				
1.	0 - 1	1/4 - 1/2	3 - 4				
2.	1 - 6	1/2 - 1	3 - 4				
3.	6 - 12	1 - 2	3 - 4				
4.	12 - 24	2 - 3	3 - 4				
5.	24 - 36	3 - 4	3 - 4				

There were 70 males and 80 females. Ninety were below the age of one year (Table II).

Table II: Age and sex distribution of the cases									
Total cases		Age Groups in Months							
		0-5	6-12	13-18	19-24	25-36			
Females	70	30	10	10	10	10			
Males	80	40	10	10	10	10			

A detailed history of complaints and other relevant information regarding their previous growth and development were recorded on a planned proforma. Bonnisan was started on these patients according to dosage in Table I. These cases were followed up in the outdoor clinics at first, weekly for one month, and then twice a month for six to eight months. On every visit the relief of symptoms were enquired into and confirmed with detailed examination. A weight record was kept as an index of improvement.

The mothers were instructed to bring their children to the hospital immediately, if they observed any increase in or appearance of new problem, before resorting to any home-remedies or consulting their family doctor. Ten cases which did not conform strictly to the protocol were not included in the study.

"Vague illness" such as in Table III is noted in those patients who have nothing much positive on examination but the parents complain that the child is not playful like the others and he is either irritable or dull. Another common problem for the parents, taken up here is the teething problems - which usually includes irritability excessive salivation, swollen gums and mild diarrhoea, at the time of eruption of teeth.

Table III: Results of therapy in various symptom groups								
Symptom Groups	No. of	Percentage	Number of cases showing	Percentage				
Symptom Groups	cases	to Total	definite improvement	improvement				
Failure to gain weight	20	13.3	15	75.0				
Anorexia	30	20.0	20	66.6				
Colics	30	20.0	26	86.6				
Vomiting / Regurgitation	15	10.0	10	66.6				
Mild Diarrhoea/non-specific	5	3.3	3	60.0				
Constipation	15	10.0	14	93.3				
Abdominal distension	10	6.6	8	0.08				
Vague illness	10	6.6	7	70.0				
Post-antibiotic dyspespsia	5	3.3	5	100.0				
Teething problems	10	6.6	8	80.0				
Total	150	-	116	77.3				

RESULTS

Out of hundred and fifty cases, 70 were females and 80 were males. The distribution of cases agewise is shown in Table II.

As is evident from Table III, 116 cases with gastrointestinal problems improved significantly with Bonnisan therapy. Bonnisan was effective in most of the cases who were suffering from post-antibiotic dyspepsia (100%), non-specific constipation (93.3%), and infantile colics 86.6%.

About 70-75% cases of failure to thrive and vague illness improved remarkably. 60-67% cases of anorexia, vomiting or regurgitation and mild non-specific diarrhoea showed significant improvement.

Teething problem which is a significant cause of anxiety among the parents showed improvement in about 80% of cases.

The response was same in both the sexes. The acceptance for Bonnisan was excellent in all the cases. No toxic side effect was seen in any of the cases.

DISCUSSION

Weight gain is an index of good growth and development, which depends upon the digestion, utilisation and assimilation of the nutrients provided in the diet. Bonnisan by its digestive qualities helps in better absorption and utilization of the food and by stimulating the various digestive enzymes is believed to promote growth. Bonnisan is also a safe, effective appetite- and growth-promoting agent⁴.

Hundred and sixteen cases, i.e. 77.3% of the total cases taken up for the study showed significant improvement in the symptoms and weight gain which was above average expected for the particular age-group. In the remaining cases the children did show some improvement but the weight-gain was not above that expected for the age. Our findings are in accordance with some authors⁶, but others have shown 100% improvement in their cases^{7,8}. The possible explanation for this difference could be that they might have included the cases who had normal weight gain at the time of study.

The success rate seems to be impressive. Bonnisan definitely gives a sense of relief to both patient and the doctor. Here one is faced with an inevitable question - what in the drug has worked? Being an Ayurvedic preparation, no definitive opinion can be given in this respect.

CONCLUSION

Upon clinical trial with Bonnisan, we have found satisfactory results particularly in cases having non-specific symptoms like anorexia, weight loss, irritability, regurgitation, and many other gastrointestinal problems. Bonnisan can be prescribed without hesitation for non-specific symptomatology with the caution that when these symptoms occur as a part of a specific gastrointestinal pathology, it might work as an adjunct to the specific therapy for that pathology.

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