

Clinical Evaluation of Co-trimoxazol (Trimethoprim/Sulfamethylthiazole) and Furazolidone  
In Treatment of Shigellosis in Children

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**OBJECTIVE:** To determine the efficacy of Co-trimoxazol in the treatment of Shigellosis in pediatric patients.

**BACKGROUND:** Co-trimoxazol is a recently developed drug consisting of 5 parts sulfamethylthiazole and 1 part trimethoprim\*\* that has demonstrated synergistic properties against a variety of bacteria. This drug and furazolidone have been shown to be very effective against a majority of Shigella spp. In vitro, however, in vivo studies are lacking. The purpose of this study is to compare Co-trimoxazol (Trimethoprim 80 mg + Sulfamethylthiazole 400mg) with furazolidone in the treatment of Shigella diarrhea in children.

**DESCRIPTION:** One hundred sixty-six patients with gastroenteritis who visited the out-patient clinic of Children's Hospital, Bangkok, during March through August 1971 were available for this study. Patients were assigned to be treated with Co-trimoxazol or furazolidone randomly. Clinical and bacteriological observations were made on the initial visit and also on every alternate day for a period of 7 days. Patients were excluded from the study if their stool cultures did not confirm the diagnosis of shigellosis.

Only 33 patients in the Co-trimoxazol group and 30 patients in furazolidone group were proven to be Shigella infections and completed the scheduled visits. These two groups were generally comparable in regard to age, sex, duration of illness and the severity of the disease. Approximately 58% of the children were younger than 2 years and the majority of the patients were seen within a few days after onset of the disease. Shigella flexneri was the most common pathogen isolated from each group.

**RESULTS:** Results indicate that Co-trimoxazol is superior to furazolidone by virtue of the shorter clinical symptoms and bacteriological responses to the treatment without any failure. See Tables 1 and 2.

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\*\* "Bactrim", Roche; and "Septin", Burroughs Wellcome.

**Table 1.**  
**Bacteriological Response to Antimicrobial Therapy in 63 Shigellosis Patients**

Drugs	Total Number of Patients	Days until Negative Shigella					
		2	3	4	5	6	7 or over
Co-trimoxazol, (trimethoprim 80mg + Sulfamethylthiazole 400 mg)	33	22	9	2	—	—	—
Furazolidone	30	11	6	5	1	—	8

**Table 2.**  
**Clinical Response to Antimicrobial Therapy in 63 Shigellosis Patients**

Drugs	Total Number of Patients	Clinically Improved (days after therapy)						
		1	2	3	4	5	6	7 or over
Co-trimoxazol, (trimethoprim 80 mg + Sulfamethylthiazole 400 mg)	33	15	16	1	1	—	—	—
Furazolidone	30	4	9	5	4	1	—	7