

A study on the typhoid and paratyphoid fever among children of Sharkat district in Iraq

Mohemid M. Al-Jebouri*, Salih Abed M. Al-Jumaily**

*Dept. of Microbiology, College of Medicine, Tikrit University

**Dept. of Pediatrics, College of Medicine, Mosul University

Abstract

Two hundred cases of typhoid fever were analysed among the suspected cases attended the Sharkat hospital, Salah-Aldeen Governorate during 1997-1998. It was concluded that the highest frequencies of incidence of typhoid fever using Widal's test were among the children of age group of less than five years. The percentages of incidence of typhoid fever among males, rural descendants, artificial feeders, of farmer families, with fever were 52, 91.5, 58 and 100% respectively. Typhoid was dominant compared to paratyphoid. Failure to thrive was low among the older children, and almost similar among children of rural and urban areas. Isolation and treatment is advised until clinical and bacteriological assays negatively is documented.

Keywords: Typhoid, Paratyphoid, distribution, children.

Introduction

The most serious of the *Salmonella* disease, typhoid fever, is an acute febrile disease with worldwide distribution caused by *Salmonella typhi*. Around 500 cases of typhoid are reported annual in the United States, with more than one-half of those acquired by patients during overseas travel.

Typhoid is endemic in many parts of the world, especially developing countries. In Latin America and Africa, because of poor sanitation and the presence of chronic carriers (1). *Salmonella typhi* is restricted to the human host; chronic carriers maintain the organism in the population, the organism survives in the gastrointestinal tract with a predilection for the gallbladder. Approximately 3% patients become carriers, shedding the organism for greater than one year after recovery.

Since various epidemiological patterns of typhoid fever have been described mostly in large cities (2, 3, 4, and 5), it seems quite relevant that there is a need to elucidate data about distribution of typhoid fever among populations of towns and rural communities. So, the present study is an attempt to highlight the typhoid picture among children of the Sharkat district, Salah-aldeen province, Iraq.

Materials and Methods

Two hundred cases of typhoid were investigated among children attended Sharkat hospital during 1997-1998. These cases were diagnosed using Widal's test (a titre 1/320 (6).

Results

During the study period, blood specimens of the suspected cases were examined at the Sharkat hospital laboratory for *S. typhi* and *S. paratyphi*.

The distribution of the positive cases according to the age of the children is represented in figure (1), the figure shows the personal and clinical characters of the studies children. The highest incidence was among the age group of more than five years. The present study shows also that males and females almost had similar incidence of typhi fever (fig.1).

The present study reveals a highest number of typhoid cases among children coming from rural area (91.5%) , and the difference was statistically highly significant ($p < 0.01$). Infants were at high risk of catching typhoid infections (fig.1). The farmer children showed a high frequency of typhoid fever (58 %) as shown in the same above figure. All the positive cases of