Epidemiological profile and outcome in typhoid fever

Introduction

Typhoid is a most prevalent disease in developing countries. Considering the transition of lifestyle in the country today, the epidemiological factors underlying this disease has fairly altered. This study was aimed at evaluating the epidemiological features and outcome of typhoid fever.

Materials and Methods

A standard questionnaire was used to collect data from seventy samples from tertiary care center. The data collected was analysed using IBM SPSS 22. The mean age of the sample is 5.74 with a standard deviation of 2.111 (N=70).

Results

Majority of them (67.1%. n=47) were above the age of five years while 23 (32.9%) of them were below the age of five years. A greater part of the sample is occupied by males (55.7%, n=39) while females occupied 44.3% (n=31). Majority of them (52.9%, n=37) came from upper lower socioeconomic status. Majority of them (60%, n=42) came from urban areas. Majority of them (61.4%, n=43) stayed between 5 and 7 days. Only 14.3% (n=10) of them had a past history of typhoid. 85.7 percent (n=60) of the children were not vaccinated among 70 of them. Blood culture growth was found in only 1.4% (n=1) of the samples. Seventy children (100%) of them were positive for blood Widal. Seventy children (100%) of them were positive for TyphiDot IgM. None of them had any complications. All of them recovered from illness. 64.3% (n=45) of them had access to corporation water while 28.6% (n=20) of them had access to can water. Majority of them (45.7%, n=32) had average personal hygiene. Majority of them (71.4%, n=50) had access to toilet. USG abdomen revealed that 42.9% (n=30) had hepatomegaly, 27.1% (n=19) had splenomegaly and
22.9% (n=16) had hepatosplenomegaly. Liver enzymes were elevated in 24.3% (n=17) of the children.

**Discussion**

The clinical signs and symptoms correlate with all the previous studies with all of the children reporting fever, majority of them having abdominal pain, vomiting, loose stools, headache, body pain, toxic look, tender abdomen, etc. The variation in signs and symptoms between various studies can be attributed to the difference in epidemiological factors that contribute to the symptomatology. Further studies are required to find out the relationship between various factors and symptoms through controlled studies. The evaluation of epidemiological factors revealed that people who consume outside food, have low hygiene, poor personal hygiene and low levels of sanitation were more prone to getting typhoid. This calls for a wide spread preventive measures.

**Conclusion**

Awareness programs should be created targeting the young children using the latest technology like social media and audio visuals. Separate programs to support research and evaluation of typhoid fever are recommended to ascertain the true nature of the disease and take appropriate measures. There should be public health programs that focus on addressing the preventive measures of this disease.

**Key words: Typhoid, Epidemiology, India, Widal, Hygiene**