

THE RELATIONSHIP BETWEEN TYPHOID AND LEUCOPENIA IN IRAQI PATIENTS

Hiba M. Nasir*, Ashwak J. Kzar and Suhad H. Aubaid

Department of Medical Laboratory, College of Health and Medical Technique, Middel Technical University, Baghdad, Iraq.

*e-mail: mansour.hiba@yahoo.com

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ABSTRACT : Typhoid was an endemic disease. Typhoid fever was diagnosed by isolation and identification of *Salmonella typhi*. So diagnosis depends upon the Widal method. Otherwise serological diagnostic tools have limitations because of their low sensitivity and/or specificity. The research facility conclusion of typhoid fever is need upon the separation of *Salmonella enterica* subsp. Sixty nine patients were examind for typhoid according to a detailed clinical diagnosis achieved by specialist physicians. This study was carried out at Iraqi Hospital. A blood sample was examined for Widal test and WBC count. The results indicate that female patients were higher than male patients (53.6%) versus (46.4%) with age group (26-45 year) comprised the higher percentage within the age grouping of the study patients (43.5%). A relation between WBC and *S. typhi* from positive cases 21.7% had leucopenia.

Key words : Leucopenia, typhoid, *Salmonella*.

INTRODUCTION

‘Typhoid turmoil, a fundamental feverish disease, is broadcast by the ‘rotten-oral course, for the most part by means of defiled nourishment with H₂O in the advancing world. A worldwide indicator no less than sixteen to twenty million instances of ‘typhoid turmoil’ happen yearly, bringing about around 600,000 deaths (Pang *et al*, 1998). Typhoid, is a disease occurs by bacterial infection because of *Salmonella typhi* that causes it (Giannella, 1996). Widal an analysis used for intesimal fever was established in 1896 by Georges Fernand Isidore Widal (Sridhar Rao, 2009). Substantial (O) and flagella (H) agglutinins to *Salmonella typhi* for sample complainer utilizing of O and H antigens (Tupasi, 1991). Typhoid fever has fitting delayed consequence on some hematological parameters studied. These progressions could be worthwhile in the diagnosis of typhoid fever. ‘The Widal investigation measures the particular antidiestitre of the patient’s serum to typhoid antigens by haemagglutination (Thong *et al*, 1995). Recently enzyme immunoassay (EIA) (Pang *et al*, 1995) and latex agglutination (Bhutta and Hendricks, 1996) systems have become available as alternative methods. In this manner, full blood count tests should be requested right on time by the clinicians for successful and provoke finding of typhoid contamination and appropriate treatment of the patients and these hematological parameters must be observed intently.

MATERIALS AND METHODS

Blood samples were collected from (69) patients. In Iraqi hospital under direct medical supervision by vein puncture using 5 ml syringe into plain tube to obtain serum by centrifugation at 5000 rpm for 10 min. Serum was kept in 20°C till serological study was performed. And venous blood in EDTA tube collected for total white blood cells count by sysmex automated machine. Vials of 5ml of bacterial suspension. The antigens were perceived by utilizes the run for fast slide agglutination to distinguish the closeness of *Salmonella typhi* and *Paratyphi*’ (Michael and Borg, 1991).

RESULTS AND DISCUSSION

Patients whose diagnosis was based on clinical and serologic grounds. A sum of 69 patients who from Iraqi hospital assented to the investigation were incorporated, their age ranged from 16 to 47 years, 32(46.4%) were male and 37(53.6%) were females, tested for typhoid fever. Table 1 covered the most noteworthy typhoid positive outcome is appeared in 37 female patients while 32 male reached to 53.6% and 46.4%, separately and this outcome was concur with Otoikhian and Okoror (2012), who found the higher susceptibility of female 38(38%) to typhoid/paratyphoid contaminations than male 22(22%). This might be because of the way that females are more helpless against such sickness because of weakness conditions and ecological elements related to