

# **Introduction and Aim of The Work .**

Typhoid fever is an acute disease due to infection by salmonella typhi and paratyphi . It is characterized clinically in typical instances by fever, headache , enlarged spleen , abdominal discomfort , constipation or diarrhea and toxemia ( **Woodruff, 1987** ) .

It will continue to occur even in countries with high standard of public health because of international travels and existence of reservoir in chronic carriers ( **Abdel wahab and Mahmoud , 1988** ) .

It continued to be a significant cause of morbidity in many parts of the world ( **Zavola et al , 1991** ) .

The essential lesion in typhoid and paratyphoid fever is caused by the proliferation of the endothelial cells, derived from the reticulo-endothelial system. The most characteristic lesion produced is the ulceration of the intestine ( **Christie , 1987** ) .

Adenosine deaminase ( ADA ) is an enzyme active in the catabolism of purines essential for T-lymphocyte proliferation and maturation in many cell mediated immunologic responses such as in patients with viral hepatitis, infectious mononucleosis, tuberculous pleural effusion and typhoid fever where ADA values are increased .( **Sullivan et al. , 1977** )

## **Aim of the work :**

This study is aimed at the assessment of ADA activity in febrile patients to determine its usefulness in the early diagnosis of typhoid fever .