INTRODUCTION

Taurine (2-aminoethanesulfonic acid) is the major intracellular free ß-amino acid which is normally present in most mammalian tissues ***(Chesney et al., 1993).*** Taurine has been linked to a wide range of bodily functions and Stapleton *et al* (1998) list roles in "osmoregulation, antioxidation, detoxification and stimulation of glycolysis and glycogenesis".The synthesis pathway of taurine is especially active in the early stages of life, and taurine is found in breast milk, suggesting that it is particularly vital at this stage.Taurine also plays a role in muscle contraction, where it enhances the ability of the muscles to generate force by catalysing the uptake and release of calcium ions ***(Harrison 2002).***

As an amino acid found in food, taurine is thought to be quite safe. There is strong evidence that taurine is safe at levels up to 3 g per day, although higher dosages have been tested without apparent adverse effects ***(Shao and Hathcock 2008).***

Gentamicin is an aminoglycoside antibiotic commonly used in the treatment of gram-negative bacterial infections. However, 30% of patients treated with gentamicin for more than 7 days show signs of nephrotoxicity ***(Mathew, 1992).***

In addition, 10–15% of all cases of acute renal failure are attributed to gentamicin administration ***(Erdem et al., 2000).*** Although the majority of aminoglycosides is excreted in the urine after drug administration, approximately 5–10% of the dose accumulates in the renal cortex and remains there long after discontinuation of the drug (**Nagai and Takano, 2004; Mingeot-Leclercq and Tulkens, 1999).**

AIM OF THE WORK

The aim of the present work is to study the protective effect of taurine on the kidney tissues when exposed to toxic dose of gentamicin. This can be detected by measuring:

1-Blood urea nitrogen (BUN).

2- Serum creatinine.

3- Histopathological examination on kidney tissues.