

Introduction

Chemotherapy involves the use of chemical agents to stop the growth & eliminate cancer cells even at distant sites from the origin of primary tumor (*Bonadonna et al.;*(1995) & *Graaf, et al., 1996*) .

However, it doesn't distinguish between cancer & normal cells and eliminates not only the fast growing cancer cells but also other fast growing cells in the body including hair & blood cells (*Graaf, et al.,1996*).

Cisplatin is a platinum –containing antineoplastic agent . It is one of the most potent chemotherapeutic antitumor agents . It has been demonstrated against a variety of neoplasms, particularly for head and neck, testicular , ovarian , bladder and lung neoplasms (*Antunes et al.,2001*) . High doses of Cisplatin produce hepatotoxicity, ototoxicity, neurotoxicity and nephrotoxicity (*Antunes et al.,2001 and Durak et al.,2002*).

Cisplatin was described as a platinum- containing compound that inhibits E-coli cell division. (*Lin, et al.,2006*)

It is also known to cause side effects in a wide range of tissues such as the kidneys, bone marrow and auditory organs.(*Bogin et al.,1994*).

However, cisplatin is a toxic agent to renal tubules and is associated with a decline in renal function. (*Yuan et al., 2008*)

Inspite of its significant antitumour activity the clinical use of cisplatin is often limited by its undesirable side effects (*Ajani, 2008 and Dank et al., 2008*).

Tubular damage & perivascular inflammation were observed in kidney treated by cisplatin. Vit C & E combination is found capable of preventing these effects of cisplatin. (*Atassayar et al., 2009*).

Cisplatin – induced renal damage is associated with increased renal vascular resistance and histological damage to the proximal tubular cells (*Yuan et al.,2008*) . Cisplatin – induced nephrotoxicity is closely associated with inhibition of the activity of antioxidant enzymes in renal tissues (*Sadzuka et al.,1992*).

Vitamin C acts as a potent water – soluble antioxidant in biological fluids (*Frei et al.,1990*). It may prevent oxidative damage to important biological macromolecules such DNA ,lipids and proteins (*Carr and Frei 1999*) . High doses of antioxidant vitamins C and E were demonstrated to be effective against Cisplatin –induced oxidative renal damage in rats (*Ajith et al.,2009 and Atasayar et al.,2009*) .However , few papers have reported on the effects of vitamins C and E in Cisplatin treated rats. So , the present study was performed to investigate the possible protective effects of vitamins C and E on Cisplatin nephrotoxicity in adult albino rats.