INTRODUCTION

Uterine leiomyomata, commonly known as fibroids, are benign smooth muscle tumours of the uterus. Estimates of leiomyoma prevalence range from 3 to 20% with all women and older women having the highest prevalence. Leiomyomata have been identified as one of the leading causes of hospitalization for gynaecological disorders and hysterectomy ***(Baird and Dunson, 2003)***.

Chronic pelvic pain or menorrhagia is the usual indicator for hysterectomy ***(Treloar et al., 1999)***.

Dietary fat intake, high body mass index (BMI), oestrogen and progesterone are well known risk factors for myoma uteri ***(Marshall et al., 1998)***.

Leptin is a protein encoded by the ob gene and appears to play an important role in energy expenditure, neuroendocrine-reproductive systems, and immune response ***(Lord et al., 1998).*** Its concentration is related to the mass of adipose tissue ***(Maffai et al., 1996).*** All risk factors of myoma may also affect serum leptin ***(Fried et al., 2000).***

Evidence suggests that leptin may have a role as an angiogenic factor in vitro and in vivo ***(Bouloumie et al., 1998).***

Leptin gene is expressed both in myomas and in the surrounding myometrium but not in the myometrium of healthy women ***(Markowska et al., 2005)***.

It was reported that there is a decrease in serum leptin levels in

women with myoma uteri ***(Chan et al., 2003).*** On the other hand, another recent study did not find any significant difference in serum leptin level between women with myoma and women without myoma ***(Bihter et al., 2007).***

In this study we will try to stabilize factors which may affect serum leptin level. Serum leptin level will be estimated and its relation with presence of myoma will be evaluated.