INTRODUCTION

Osteonecrosis of the femoral head is a pathologic process resulting from death of living elements of bone. It is not a specific disease but rather the end result of various conditions, ultimately, with impairment of blood supply of the femoral head. **(Plancher, and Razi, 1997)** These conditions culminate in a loss of subchondral support of the articular surface, which leads to collapse and subsequent osteoarthrosis of the joint. This disorder generally affects patients who are younger than fifty years, in whom joint replacement should be avoided. **(Sean, et al, 1998)**

Preservation of the femoral head is the primary goal in surgery for osteonecrosis of the femoral head. Improved diagnostic techniques have made it possible to intervene before segmental collapse occurs, but no one technique has been completely satisfactory. **(Steinberg, et al, 1990)**

Core decompression of the necrotic area for treatment of idiopathic osteonecrosis of the femoral head was developed and published by **Ficat** and **Arlet** in **1962** within the scope of their "Functional exploration of bone". **(Schneider, et al, 2000)**

Core decompression was originally described as a diagnostic procedure, but it was later proposed that the procedure has a therapeutic benefit. **(Arlet, 1992)** Different surgical procedures have been recommended for treatment of osteonecrosis of the femoral head to prevent or delay the need for arthroplasty. Core decompression is a commonly used treatment in the early stages of the disease, but the published efficacy has varied markedly. **(Simank, et al, 2001)**

It gained popularity, because of early promising results, low morbidity, and a paucity of alternative treatments. Core decompression is thought to relive the intraosseous compression that caused by interstitial edema, improves vascularity, and slows the progression of necrosis within the femoral head. The decrease in intraosseous pressure may result in marked relief of pain. **(Ficat, 1985)**

There have been several fairly large retrospective reviews assessing the results of core decompression performed with various techniques. In all of these studies, it was found that the result of core decompression were subsequently worse when there had been collapse of the femoral head preoperatively. **(Liberman, et al, 2002)**

AIM OF THE WORK

The aim of the work is to highlight the technique and 2 years follow up of results of core decompression augmented with cancellous bone graft in the progression of avascular necrosis of the femoral head.