

# ***INTRODUCTION***

## **Introduction:**

The past decade has been exciting for orthopaedic surgeon with an interest in knee diseases as well as for their patients . Rapid strides that have been made in the understanding of knee anatomy and mechanics , in the design of total knee systems and instrumentation and in fixation techniques have resulted in total knee arthroplasty becoming a proven and accepted addition to the procedures the orthopaedic surgeon can offer his patient with knee disease<sup>1</sup> .

A surgeon performs total knee replacement arthroplasty in order to create a joint with pain free functional arc of motion and with stability in the sagittal and coronal planes<sup>2</sup> .

It is difficult to formulate the precise indication for knee replacement and it is unwise to try, for such formulate breed dangerous dogmatism. The decision to replace an arthritic knee is influenced by a number of factors , including the patient's age , the quality of life , the general condition , the precise nature of the underlying disorder , the precipitating symptoms , the life style , and of course the clinical and radiological state of the affected knee joint<sup>3</sup> .

Great advances has been made in total knee arthroplasty in the last ten years. General agreement has been reached regarding the technical demands of the surgery and the need for precision in alignment and component position . Most prosthesis have evolved to tricompartmental design and more or less anatomic appearance . It is now generally agreed that intrinsic constraint of the prosthesis, although necessary in occasional situations, is generally undesirable. Considerable controversy remains concerning the fate of cruciates and whether methyl methacrylate is necessary or desirable. Although much interest has been sparked in cementless fixation of endoprostheses, there is no lack of controversy

as to how to achieve that goal with press fit, mechanical interlock , and soft tissue and bony ingrowth all finding proponents<sup>4</sup> .

To appreciate fully the current status and future directions of knee arthroplasty, it is necessary to review the knee anatomy and kinetics, as well as to discuss the controversies that remain and describe current technique and results.

### **Aim of the work:**

The aim of the work is to evaluate the use of total knee replacement as a method of many degenerative knee joint condition with everlasting destruction , deformity and pain, and this will be done through a prospective and retrospective analysis of 30 cases of total knee replacement as regarding indications , preoperative assessment, operative procedures , postoperative rehabilitation and long term results.