

Introduction

Total hip replacement "T.H.P" has brought an entirely new dimension to orthopaedic surgery since it was introduced by Habonsh (1953), Wiles (1958) and Charnley (1973¹⁹⁶⁻) .

Callaghan, (1992) .

The goal of T.H.R is to obtain a durable , painless and functional hip in those people affected with severely limiting arthritic conditions . The problem of permanent and safe fixation of the implant to the bone has yet to find a definite solution .

(Callaghan, 1992).

There are two types of T.H.R which are usually employed ; cemented and cementless types . Although there are many reports of excellent results with cemented T.H.R , the main long-term problem in cemented T.H.R is loosening of the implant, and the consequent necessity for revision (Huo et al., 1992) . This had led to the introduction of a new type of T.H.R using a prosthesis which is fixed without bone cement (Engh, 1983) .

The cemented fixation has the advantage of providing an immediate strong mechanical interlock with bone , and a quick, reliable and dramatic relief of pain . The main drawbacks still the high failure rate in the long-term especially in the younger patients and in revision arthroplasty (Engh et al., 1988) .

Concerning cementless type, the real advantage of cementless fixation is it's potential for obtaining a permanent bond with bone, so