Title: Clinical and radiological outcome analysis of total hip replacement.

Background: Fifteen adult cases of uncemented total hip replacements were assessed clinically (by Harris Hip Score) and radiographically by serial radiographs and CT scan. In the postoperative Harris Hip Score the neck of femur groups and the arthritic hip groups had comparable results. Uncemented total hip replacement gives acceptable results in otherwise disabling condition of hip.

Keywords:

Osteointergration-direct structural and functional connection between ordered living bone and the surface of a load carrying implant, Bone ingrowth was evaluated radiologically by assessing radiodense regions and spot welds. Loosening- Radiolucent lines of more than 2mm at the bone - implant interface (in Gruen and DeLee and Chanley zones) with acetabular cup migration or femoral subsidence.

Materials and Methods:

Prospective evaluation of 15 patients in the age group of 18 years to 60 years with good general condition and no septic foci underwent uncemented total hip replacement for various indications between June 2013 to March 2015.
The periodic evaluation were done both clinically and radiologically with CT scan at regular intervals.

**Results:**

Among the 14 patients with 15 hip replacements (one bilateral), the overall improvement in average Harris hip score was from 29.9 preoperatively to 91.4 postoperatively and only in 1 case we observed deterioration in Harris hip score by loosening, but it still gave fair result.

**Conclusion:**

This is a short term study of one particular type of uncemented Total Hip Replacement system without comparison with matched or randomized group. In this study clinical assessment correlated well with radiographic appearance and CT scan. There were no evidences of osteointegration in any case possibly because of short duration of study. There was evidence of loosening in only one case. In the postoperative Harris Hip Score the neck of femur groups and the arthritic hip groups had comparable results.