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## Total joint replacement at BPKIHS, Dharan, Nepal

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### Abstract

**Background:** Total joint replacement is a surgical procedure in which parts of an arthritic or damaged joint are removed and replaced with a metal, plastic or ceramic device called prosthesis. The prosthesis is designed to replicate the movement of a normal, healthy joint. The goal of orthopedic treatment is to relieve pain and restore function.

**Aim and Objective:** To diagnose and manage the damaged joints by Total joint replacement presented to department of Orthopaedics, BPKIHS, Dharan.

**Materials and methods:** This is retrospective interventional study done at the department of Orthopaedics, BPKIHS, Dharan, Nepal over a period of 4 years from 2010 to 2014. A total of 25 patients with problems of either knee/Hip joint were treated by total joint replacement. The patient's age ranged from 30 to 65 years and the mean follow-up was 24 weeks. Results: The study comprised of 65 patients with problems of either knee/Hip joints were treated by total joint replacement. The age incidence in this series ranged from 30 years to 65 years. Among 65 patients, 15 cases were knee and 50 cases were hip. Among 15 cases of knee, 1 case was bilateral. 47 patients were males and 18 were female.

**Discussion:** Several conditions can cause joint pain and disability and lead patients to consider joint replacement surgery. In many cases, joint pain is caused by damage to the cartilage that lines the ends of the bones (articular cartilage)-either from arthritis, a fracture, or another condition. The majority of patients are able to perform daily activities more easily after joint replacement surgery. Most people can expect their joint replacement to last for many years, providing them with an improved quality of life that includes less pain, along with improved motion and strength that would not have been possible otherwise.

**Conclusion:** Total joint replacement is excellent treatment methods for damaged joints of knee and hip. Our early results show the same.

**Keywords:** Joints, total joint replacement, cartilage

### Introduction

Osteoarthritis is the most common joint disorder worldwide. The radiographic evidences of osteoarthritis is seen above the age of 65 years in majority of the persons. Osteoarthritis of hip joint are secondary to other pathology, so the presentation of osteoarthritis of hip may occur in early adulthood. Various Surgical treatment options for Osteoarthritis of joints have been described: Osteotomy, Arthrodesis, Joint replacement surgery, Joint replacement surgery is a surgical procedure in which parts of an arthritic or damaged joint are removed and replaced with a metal, plastic or ceramic device called prosthesis. Joint replacement surgery has a major impact on the preservation of physical independence, general health in the ageing population, Improve the quality of life in younger ones. Joint replacement Helps in relieving pain, restoring range of motion, improving walking ability.

### Aim and Objectives

To study the outcome of patients with severe osteoarthritis of joints who had undergone total joint replacement surgery in the Department of Orthopaedics, BPKIHS, Dharan from 2010-2014.

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**Materials and Methods**

It is Retrospective Interventional study done at: Department of Orthopedics, BPKIHS over a period of September 2010 - July 2014. All patients above 18 years OG age with severe OA of joints were included in the study. The Sample size is 65.

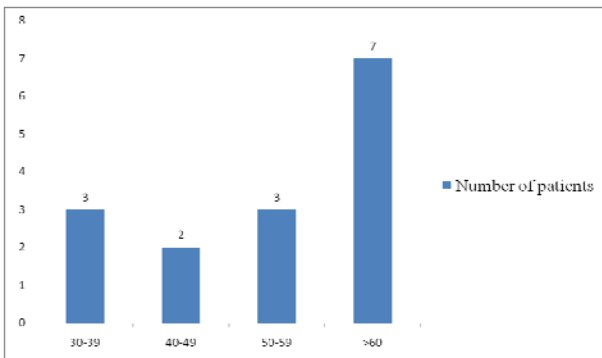
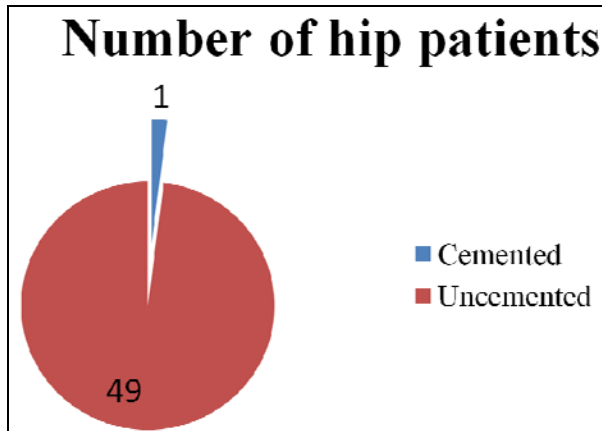
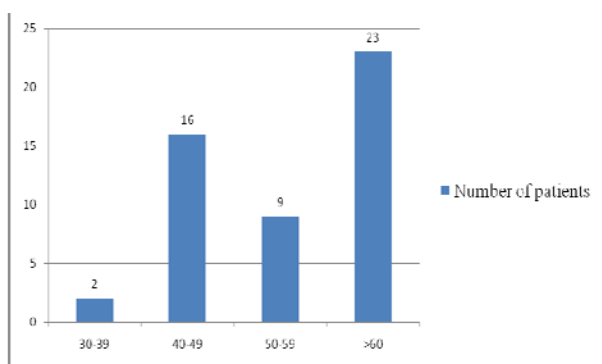
**Inclusion criteria**

- All patients with diagnosis of osteoarthritis of Hip and/or Knee
- Traumatic AVN / Non union of NOF

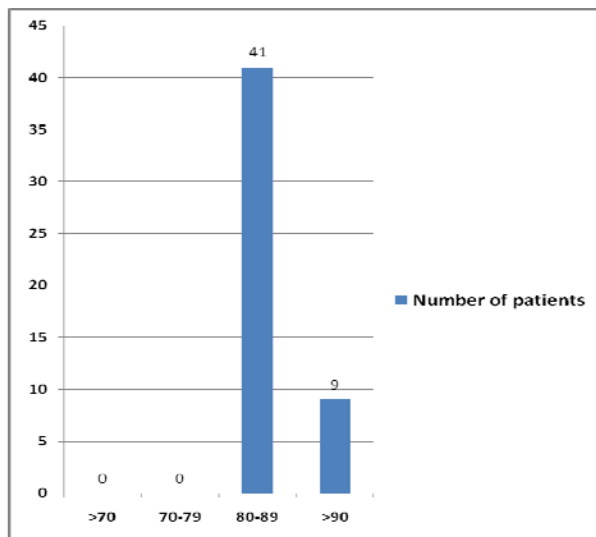
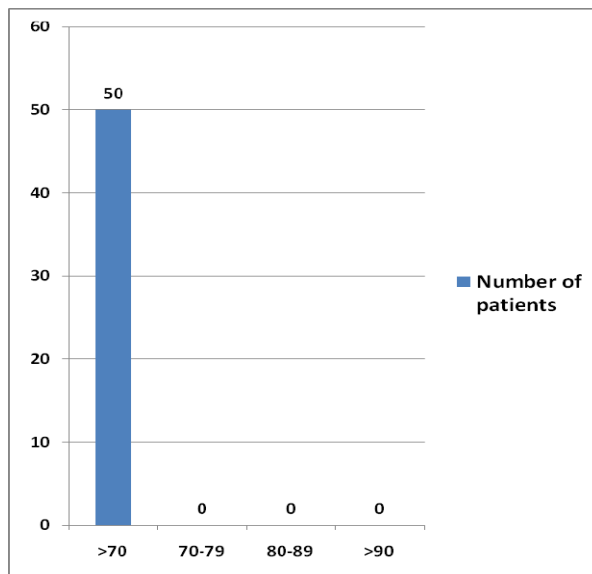
**Exclusion criteria**

- Infection
- Malignancy
- Active Inflammation
- Patient not fit for surgery

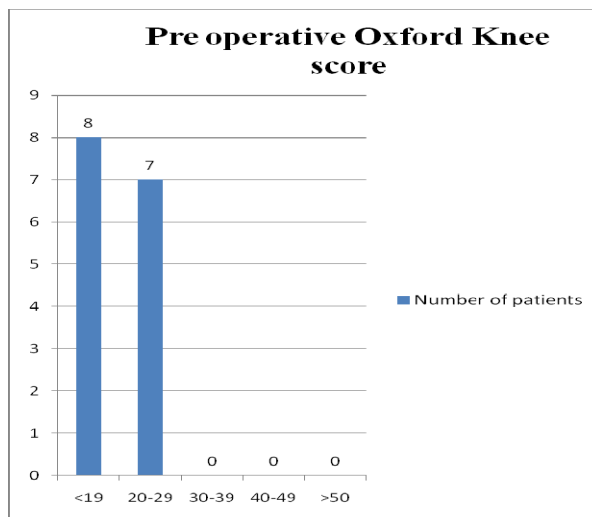
**Results**

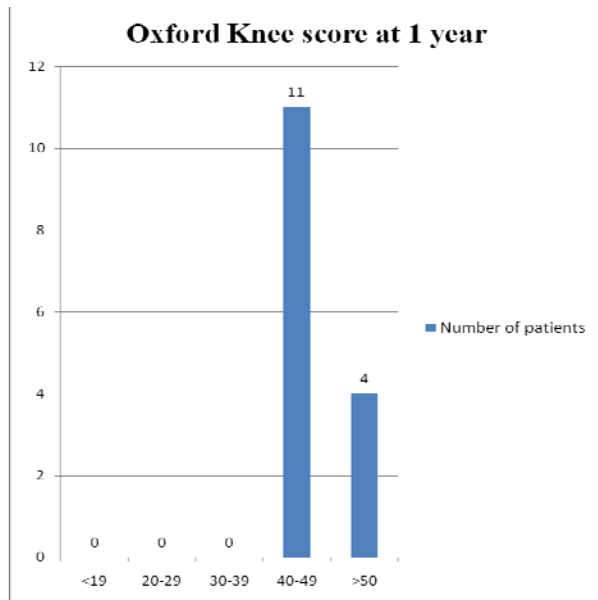


**Outcome of Total Hip Replacement**

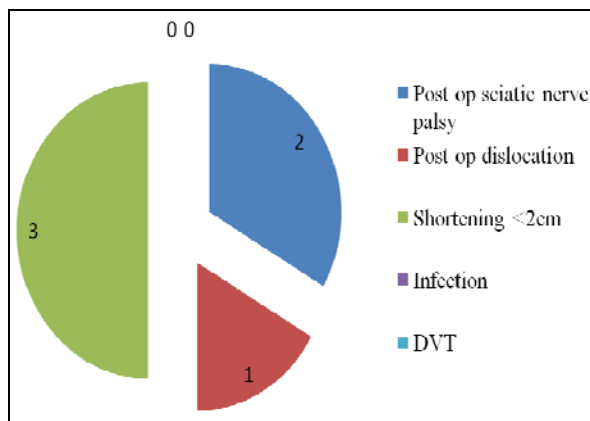


**Outcome of Total Knee Replacement**

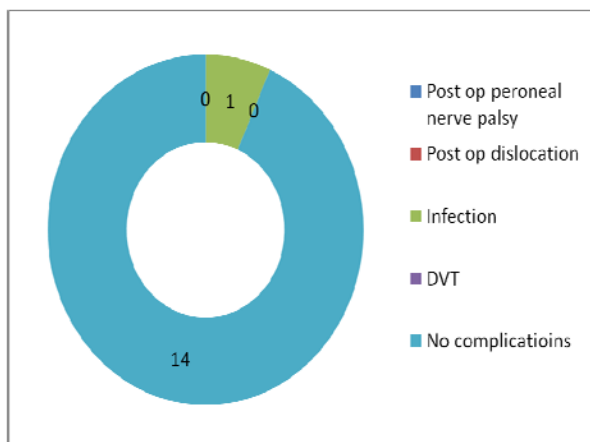




### Complications of THR



### Complications of TKR



### Pre-Operative and Post-operative Pics



Fig 1

### Discussion

Joint replacement surgery is one of the best modalities of treatment in patient with severe osteoarthritis having disabling pain. Hip and knee replacement surgery are the most common joint replacement surgery with best outcome done worldwide. Well-conducted studies in representative populations of patients with total hip and knee joint replacement suggest that many people continue to have painful joints after surgery. The proportion of people with an unfavourable long-term pain outcome ranges from about 7% to 23% after hip replacement and 10% to 34% after knee replacement. Similarly, about 10% of patients with hip replacement and 30% with knee replacement do not have a long-term functional improvement that is clinically or statistically significant. The amount of improvement in walking performance is rarely large. We found that physiotherapy following discharge after TKR was a more common practice than after THR. For patients following TKR, the focus was on knee-specific strengthening, stretching and functional exercises provided in a group setting.

In our study there was a suggestion that patients who received a programme of post-discharge physiotherapy exercise after TKR achieved short-term improvements in physical function and pain. However, this was based on a small number of studies with low numbers of patients. There was no evidence, again from a few small studies, for better longer-term recovery in patients receiving physiotherapy exercise. Regarding provision at home, further research is needed to establish equivalence or additional benefit in comparison with that provided in an outpatient setting

In this study, Total of 65 patients with severe OA of knee and hip were operated. Among total patients, 50 were hip cases and 15 were knee cases. The patient's age ranged from 30 to more than 60 years. 15 patients were males and 10 were female. Among 50 hip cases 49 were done with uncemented and 1 was done cemented. Outcome of both knee and hip replacement in 1 year follow up has improved significantly in hip cases, Post operative sciatic nerve palsy, post operative dislocation and shortening less than 2cm is 2, 1 and 3 respectively. Infection and DVT is not seen in anyone cases in our study. In 15 knee cases, infection was seen in 1 case

### Conclusion

Total joint replacement is excellent treatment methods for *severely* damaged joints of knee and hip. Our results at BPKIHS are also encouraging

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