INTRODUCTION
INTRODUCTION

Opposition of the thumb is a complex movement comprising of abduction, flexion and internal rotation (pronation) of the first metacarpal. Flexion, Pronation and radial deviation at metacarpophalangeal joint and extension or flexion at the interphalangeal joint. It is the result of the co-ordinated action of small muscles of the thumb Flexor pollicis brevis, Abductor pollicis brevis and Opponens pollicis brevis along with the long muscle of the thumb.

Loss of opposition of the thumb results in severe functional impairment to the hand. This important movement of the thumb may be lost in leprosy, Poliomyelitis and injuries to median and ulnar nerve.

In leprosy patient, hand is the most common site of deformities due to ulnar and median nerve palsy. In hyperendemic areas of South-India 20-30% of leprosy patients show
deformities or disability relating to hand
(Dharmendra et al., 1978).

Restoring opposition by tendon transfer
has shown its importance by various articles in
the literature on this problem (Bunnel's, 1938).
A number of procedures have been demonstrated
in which a single tendon issued for replacing
the combined action of at least half a dozen
paralysed muscles. Sterling Bunnel's technique
(1938) and its modification by Jacobs and
Thompson and by Brand are the most widely used
procedure for restoring opposition. Each
procedure has given good results in majority of
cases in any large series. However certain
general conditions, adequate passive motion at
the involved joint and suitable amplitude,
strength and direction of pull of muscle whose
tendon is to be transferred, some times do not
meet and elongated or pulp to pulp punch is
difficult to obtain in various series. Therefore
new techniques of tendon transfer in cases of
opponensplasty are still being evolved.
AIMS OF STUDY

In the present study the extensor digiti minimi is used as the motor power for restoring opposition of the thumb with the following aims:

1. The area of Bundelkhand is the most backward area of the province. Leprosy patients with deformities of hand are in abundance. Working on this problem will rehabilitate them by providing proper function to hand.

2. To evaluate the result of opponensplasty using extensor digiti minimi in cases of leprosy having loss of opposition.