

Introduction

The frequency of trochanteric fractures in world population is high, accounting about one case in every eight orthopaedic emergency admissions *Dhal et al., 1991*.

The aim of treatment of trochanteric femoral fractures is to achieve bone union in a good position with a low mortality, with the least discomfort to the patient and with the greatest economy *Varghese et al., 1989*. Achieving union is not a problem, since trochanteric fractures are through vascular cancellous bone. The problem is to maintain or reconstitute the neck-shaft angle. The best that a surgeon can achieve is, to secure this position while allowing the patient to enjoy early ambulation *Esser et al., 1986*.

In developing countries, many patients with trochanteric fractures are unsuitable for treatment by conservative means or by conventional open reduction and internal fixation. External fixation after closed reduction seemed to fulfill all the requirements of treatment listed above. The technique is simple, quick and inexpensive, and causes minimal surgical trauma. All these features are particularly relevant where resources are limited *Dhal et al., 1991*.

Most of the patients with trochanteric fractures are at high risk, under-nourished and anaemic, so it is preferred to use a method of treatment which minimizes blood loss. As the incidence of HCV infection increases, more and more patients at risk with blood transfusion. External fixation may be the appropriate treatment for these patients *James et al., 1983*.

The most effective conservative method is modified Hamilton Russell traction. The results of this treatment are good provided the patient can survive the hazards of prolonged recumbency. A major advantage of the external fixation method is that the average hospital stay is less than two weeks *Dhal et al., 1991*.

Internal fixation of trochanteric fractures has often failed due to late collapse. *Jensen et al., 1980* found that in unstable fractures the failure rates varied with the implant used - McLaughlin blade-plate 53%, Jewett nail-plate 44%, sliding nail-plate 6%, Ender nailing 19%. Their study did not include dynamic hip compression screws but these have been shown to be only slightly better than the Jewett nail-plate, even in the hands of experienced surgeons *Esser et al., 1986*.

Although external fixation has been in vogue for quite some time, as far as we are aware there has been no previous report of its use in a series of trochanteric fractures. The reasons for this might include:

- 1) The fear that the external fixator pins transfixing the fracture could cause infection at that site.
- 2) That penetration of the pins could lead to septic arthritis of the hip.
- 3) That external fixation cannot provide rigid immobilisation.
- 4) Knee stiffness is probably the result of transfixing the vastus lateralis muscle *Dhal et al., 1991*.

But External fixation of trochanteric fractures offers the advantages of preserving the fracture haematoma, minimal surgical trauma, negligible blood loss, early ambulation, a short hospital stay and removal as an outpatient procedure. It is simple to perform, is inexpensive, and yet provides good results *Dhal et al., 1991*.

Aim of work

The aim of this work is to evaluate the results of the external fixator as a line of treatment for trochanteric fractures in High risk patients. As it allow earlier mobilization and better alignment of the fracture than the other conservative measures with less surgical trauma and minimal blood loss with avoidance of other hazards of major surgery.