

# Simple Suspension System of Thomas' Splint on Bamboo Balkan Beam

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**A simple reusable suspension system of Thomas' Splint with bamboo Balkan beam used in the treatment of 25 cases of fracture shaft of Femur is described for its low cost, easy assembly, better mobility and care of the patient in the bed.**

## INTRODUCTION

Thomas' splint and Balkan beam are most commonly used in the orthopaedic practice. Reports on suspension system of Thomas' splint on sophisticated Balkan beam using springs (Denman, 1962) and elastic cords (Macpherson and McGregor, 1981) are available in the literature. Those are costly and not frequently available at small centres.

We present simple suspension system of Thomas' splint over a bamboo Balkan beam in the bed with the help of which, not only the patient is able to move in the bed, but is also helpful in daily nursing care.

## MATERIAL & METHOD

Twenty-five cases of fracture shaft of Femur treated conservatively on Thomas' splint during 1983 to 1986, in E.S.I. Hospital, Jaipur, are included in this series. The age ranged between 16 to 60 years. All patients were applied fixed traction on Thomas' splint after reduction of fracture. A bamboo Balkan beam was constructed by 10 bamboos tied together. The Thomas' splint was then suspended by two discarded bicycle tubes (Fig. 1). The tubes are kept in



Fig. 1. Patient with Thomas' Splint suspended by discarded bi-cycle tubes in bamboo Balkans' beam.

such a tension so that the limb is suspended 15 cm. to 25 cm. above the surface of the bed. The patient can lift and move the body in both the axis on the bed (Fig. 2). This not only helps in the mobility and nursing care of the patient but helps in performing increasing resistance exercises of the hip muscles along with routine static Quadriceps exercises.

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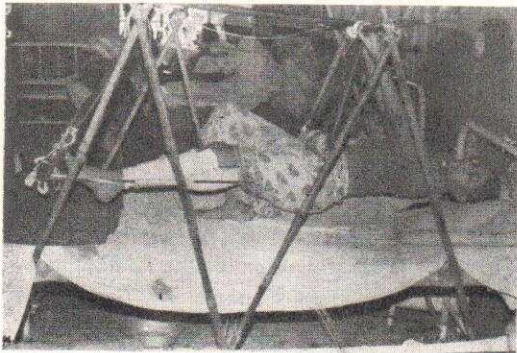


Fig. 2. Patient can lift herself from the bed and can move in both axis.

Thus movements at the hip is also an added advantage. The complaint of the patient which

we have encountered was pressure caused by the Thomas' splint ring over postero-medial aspect of the thigh. However the pressure is tolerable and without discomfort.

#### DISCUSSION

A simple method of suspending Thomas' splint on bamboo Balkan beam is presented. The material used to assemble the Balkan beam and suspending the Thomas' splint is easily available and cheap. This provides comfort and mobility to the patient in the bed and facilitates nursing care. This method is applicable easily at all places.

#### REFERENCES

1. **Denman, E. E.**, Spring Suspension for Thomas' Splint, *British Medical Journal*, 2, 47, 1962.
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