

## CASE REPORT: TRAUMATIC HIP DISLOCATION IN PAEDIATRIC

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### INTRODUCTION:

Traumatic hip dislocation in paediatrics population has relatively rare incidence. Of these, only 5%, or 0.8 cases per million, occur in children under the age of 14 years.<sup>1</sup> Most cases had posterior hip dislocation. This condition consider orthopaedics emergency which reduction is a must within 6 hours. Usually, reduction will be done in Emergency department by the medical officer with the help of medical assistant. We present the case of paediatrics posterior hip dislocation successfully reduced using classic Bigelow Maneuver in Emergency Department.

### REPORT:

3 years old child had alleged motor vehicle accident presented to our casualty within 1<sup>st</sup> hour of trauma. Upon review, child appeared in pain with his right hip on flexion and internal rotation position (Figure 1). His lower limb neurovascular examination was normal. X-ray showed posterior hip dislocation.

Under sedation, medical officer used Bigelow Maneuver and successfully reduced the hip in less than 3 hours since trauma time. Post reduction, hip stability was tested with lower limb distal circulation and neurology was assessed. X-ray was reviewed, hip was successfully reduced and no fracture was seen. (Figure 2) Subsequently child was admit to general ward for skin traction and pain management.

**Figure 1: Lower limb position**



**Figure 2: X-ray pre and post reduction.**



The Bigelow maneuver is perhaps one of the most commonly performed technique and should be easy to use in paediatrics patient. The operator reduces the dislocation by flexing the knee, gentle traction in line of femur while abducting and external rotating the affected leg. Avascular necrosis (AVN) is the feared complication of hip dislocation. Delay in reduction >6 hours will increase the risk of AVN.

### CONCLUSION:

Traumatic paediatrics hip dislocation is a rare injury and should be reduced as soon as possible to decrease the rate of AVN. Medical officer should be well versed regarding common reduction technique and perform the reduction gently especially in paediatrics patients.

### REFERENCE:

1. Herrera-Soto JA, Price CT. Traumatic hip dislocations in children and adolescents: pitfalls and complications. *JAmAcadOrthopSurg.*2009;17:15–21