

Table 3: Pattern of Dislocations

SIDE			ANTERIOR	POSTERIOR	CENTRAL
Right	Male	(n =9)	4	5	2
	Female	(n = 3)	0	2	1
Left	Male	(n = 10)	0	0	0
	Female	(n =1)	0	9	0
Bilateral	Male	(n =1)	0	1	0
	Female	(n =0)	0	0	0
Total			4 (16.67)	17 (70.83)	3(12.5)

PATTERN OF DISLOCATIONS

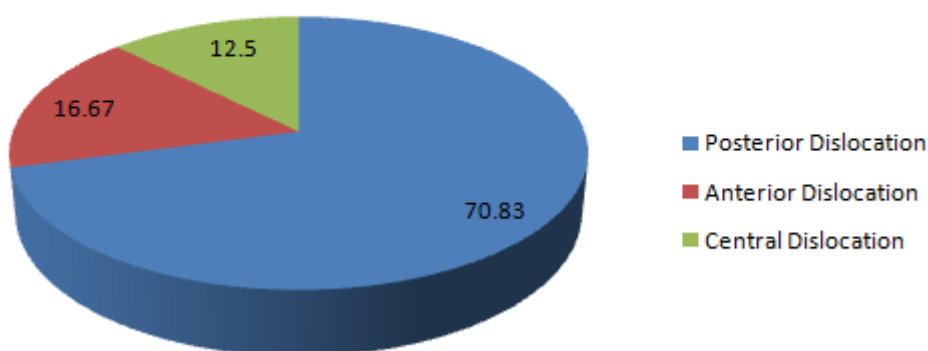


Table 4: Frequency of Posterior Hip Dislocations (Thompson and Epstein)

	#	%
Type I	8	47.06
Type II	5	29.41
Type III	3	17.65
Type IV	1	5.88
Type V	0	0

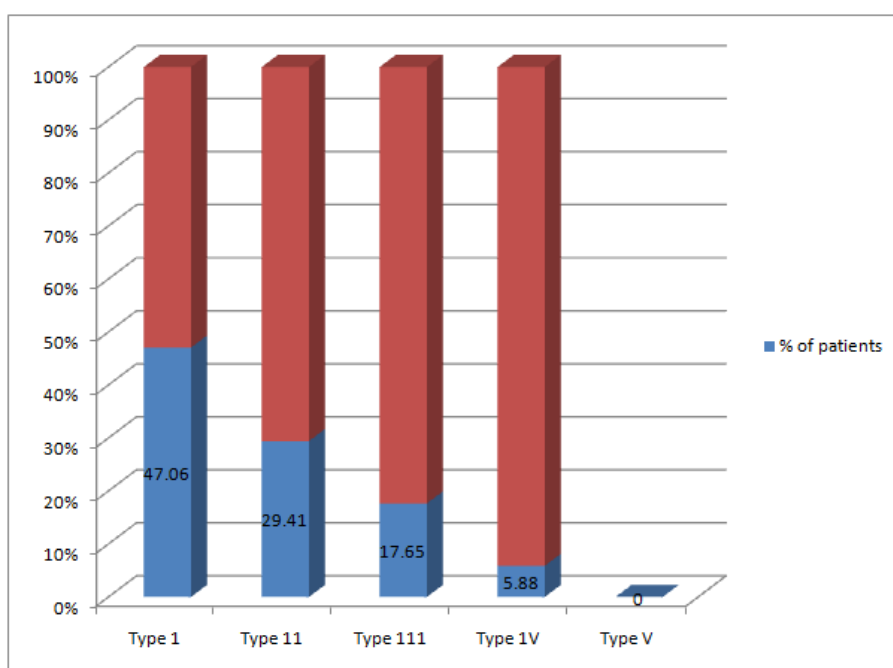
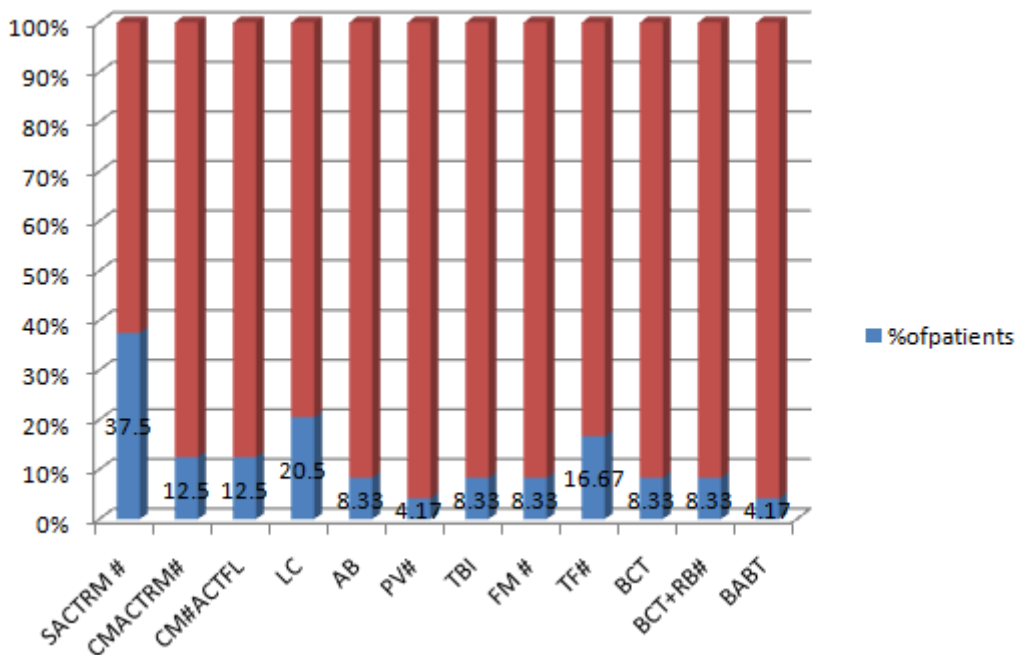


Table 5: Associated Injuries n = 11 (45. 83%)

Injuries	Percent
Single fracture of acetabular rim (9)	37.5
Comminuted fracture of acetabular rim (3)	12.5
Comminuted fracture of acetabular floor (3)	12.5
Lacerations (5)	20.83
Abrasions (2)	8.33
Pelvic fracture (1)	4.17
Traumatic Brain Injury (2)	8.33
Fracture of femur (2)	8.33
Tibia & fibular fracture (4)	16.67
Blunt chest trauma alone (2)	8.33
Blunt chest trauma with rib fractures(2)	8.33
Blunt abdominal trauma(1)	4.17



KEY

- SACTRM#=Single acetabular rim fractures
- CMACTRM#=Comminuted acetabular rim fractures
- CM#ACTFL#=Comminuted fractures of Acetabular floor
- LC=Lacerations
- AB=Abrasions
- PV#=Pelvic fractures
- TBI=Traumatic brain injury
- FM#=Femoral fractures
- TF#=Tibia and fibular fractures
- BCT=Blunt chest trauma
- BCT+RB#=Blunt Chest trauma+rib fractures
- BABT=Blunt Abdominal trauma



Posterior dislocation right hip (pre-reduction)



Posterior dislocation of the right hip (Post-reduction)

4. Discussion

In adults, late, unreduced traumatic posterior dislocation of the hip is usually the result of a motor - vehicular accident in which coma, fracture of the ipsilateral femur or tibia, dislocation or fracture of the contralateral hip masks the presence of a dislocation⁹. Hence there should be a high index of suspicion.

In this study, males were more commonly affected. This is not unexpected. They are the bread winners of their families, travelling and transporting goods and services across the country, making them more susceptible. Other authors have reported similar findings.

Majority of patients were in the second and third decades of life. This is not surprising as trauma, especially motor vehicle accident commonly affect young people in this age bracket. These are the most active and vulnerable age groups.

The commonest type of dislocation in our review was posterior, 70.83% of cases. This is in keeping with findings of other workers⁵. Anterior hip dislocation constituted 16.67% which was close to 12% recorded by Epstein⁵.

Hip dislocation was commoner on the right side. There is a disagreement in the literature regarding causative trauma and the side of hip dislocations. Levin et al¹⁰ reported that with left sided steering cars, the left hip was most vulnerable. Dreinhofer et al found no correlation with placement of the steering wheel.

Associated injuries were seen in 45.83% of cases. Considering the enormity of force required to cause this injury in a joint that is inherently stable, associated injuries occurring would not be a surprise. Hak and Goulet noted an associated injury incidence of 95% in their series¹². In Hak and Goulet series, 45% of the patients (who had road

traffic accident leading on to the posterior hip dislocation) were restrained with seat belt, hence, higher force were probably involved in the mechanism of injury and thus account for the higher incidence of associated injury in their series. In our environment, seat belts are still hardly worn by motorists despite the intervention/attempts at raising awareness by members of road safety corps, and thus a relatively lower force generated following road traffic accidents may lead to hip dislocation with a relatively lower associated injuries. Most authors have found associated injuries to be common and to result from motor vehicular accident.^{5,12}

95.83% of cases resulted from road traffic accident. Pietrasal,¹³ reported 62- 93%, Alonge et al¹² reported 100%.

Injury to the sciatic nerve has been reported to occur in 10% of all hip dislocations,¹² however we found none in our study.

Majority of cases of posterior hip dislocations were grades I and II. Both constituted 76.47% of cases. Other authors reported similar findings.^{12, 14}

Open reduction was indicated in three patients. This was because attempts at close reduction failed, due to loose bodies or soft tissues trapped within the joint.

95% of the cases presented within 6hours. This appears rather unusual. Interestingly, that was our finding. Motorcycle constitutes the mainstay of transportation in our environment. Following the ban of motorcycles in Benin- city, which is the state capital, 80 kilometres from Irrua, this resulted in an upsurge of commercial motorcyclists in our environment so as to sustain their livelihood. There is a very close niche among the people. They demonstrate compassion by being there for themselves in times of need. Each time a vehicular accident occurs, these motor-cycle riders are easily available and handy. Their ability to navigate rough and difficult terrain is an added advantage. Within a very short while, following a road traffic accident, the patients are brought to the hospital speedily on these motor-cycles, and most of the time inappropriately.

Delay in reduction was present in one patient (4.12%) and this was due to late presentation. This delay can be avoided if the diagnosis was promptly made by the attending physician and reduction or referral made immediately.

Traumatic arthritis is a long term complication of hip dislocation,⁸ while osteonecrosis of the femoral head following isolated hip dislocation have been reported in 2% - 17% of injuries¹⁵. Only one (4.17%) patient was found to have osteonecrosis of the head of the femur, which is similar to the above finding. Early reduction due to the early presentation of the majority of patients may account for this. We could not follow up our patients beyond five months as majority did not turn up after wards. Perhaps we may have been able to detect more, if they had not dropped out of follow - up. This is because;

osteonecrosis of the femoral head can develop as late as two years after hip dislocation¹⁵. The early detection osteonecrosis is also difficult as facilities for this are scarce in our environment.

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