UNREDUCED ANTERIOR DISLOCATION OF THE HIP

Report of Seven Cases

N. D. AGGARWAL and HARDAS SINGH, PATIALA, INDIA

From the Government Medical College, Patiala

Traumatic anterior dislocation of the hip is a comparatively rare injury. Thompson and Epstein (1951) reported 204 cases of dislocation of the hip, of which only eighteen were anterior. Brav (1962) reported sixty-six cases among 523 dislocations of the hip, with one case of bilateral anterior dislocation.

Because of well organised health services and generalised consciousness among the public regarding early treatment of injuries, description of neglected cases is not forthcoming from the western literature. Thus the orthopaedic surgeon of the West is not likely to come across old mismanaged cases of dislocation of the hip, especially of the anterior type. Three cases of neglected traumatic dislocation and one case of pathological dislocation have been reported by Hamada (1957) from the Middle East. Neglected cases offer a problem, for they are not seen often enough to give an individual orthopaedic surgeon enough experience to form conclusions.

The authors here report six patients with unilateral and one with bilateral unreduced anterior dislocation of the hip. The cases are of interest both because of the peculiar mode

TABLE I
DETAILS OF SEVEN PATIENTS OPERATED UPON

Case number	Age (years)	Sex	Occupation	Mode of injury	Delay in securing proper treatment (months)	Presenting symptoms	Clinical examination of affected hip and spine
1	45	Male	Farmer	Struck by a falling log of wood on the lower part of the back in stooping position	12	Inability to bear weight on the right lower limb. Deformity right hip	Fixed flexion 80°. Fixed abduction 45°. Lateral rotation 20°. Movements nil. Head palpable in the obturator region. Spine—lumbar lordosis increased, with tilt to right. Limb longer by 1½ in. (3.7 cm.)
2	68	Male	Farmer	Fall from 10 ft. (3 metres) height landing on his flexed and abducted knee	13	Limitation of movements left hip. Inability to sit on the ground	Lateral rotation deformity 45°. Femoral head palpable just below the anterior superior iliac spine. Movements nil. Shortening 1½ in. (3.7 cm.)
3	55	Male	Farmer	Roof of collapsing house fell on the lower part of his back in stooping position forcing both his lower limbs into abduction and flexion	9	Inability to stand. Limitation of movements of both hips	Both hips showed fixed flexion 90°. Fixed abduction 60° and slight lateral rotation. The femoral head was palpable under the adductor muscles on both sides. Movements nil. Spine—marked lumbar lordosis (Fig. 4)
4	20	Male	Labourer	Struck by a falling log of wood on the lower back	5	Right hip deformity. Inability to bear weight on this limb	Fixed flexion 90°. Abduction 60°. Lateral rotation 30°. Movements just a jog of flexion. Head palpable in the obturator region. Spine tilted to the right. Limb longer by 1½ in. (3.1 cm.)
5	22	Male	Farmer	During wrestling while he was in knee-elbow position, the opponent fell on his back	3	Deformity left hip. Inability to bear weight on the left lower limb	Fixed flexion 90°. Abduction 35°. Lateral rotation 20°. The femoral head was palpable under the adductor muscles. Only a jog of movement was possible. Spine tilted to left. The left lower limb was longer by 1 in. (2.5 cm.)
6	35	Male	Labourer	Fall from a bullock cart, landing on his flexed and abducted knee	1½	Deformity left hip. Inability to bear weight on left lower limb	Fixed flexion 60°. Abduction 60°. Lateral rotation 30°. Femoral head palpable under adductor muscles. No movement possible. Limb longer by 1½ in. (3.1 cm.). Spine tilted to left
7	28	Male	Labourer	While he was lifting a wheat bag it slipped and struck the flexed right knee, forcing it into abduction and lateral rotation	3	Deformity right hip and inability to bear weight on the right lower limb	Fixed flexion 90°. Abduction 60°. Lateral rotation 30°. Head palpable in the adductor region. Only a jog of movement possible. Limb longer by 1½ in. (3.1 cm.). Spine tilted to right

TREATMENT

Management of old unreduced anterior dislocation of the hip is a taxing problem, because it is difficult to restore a normal hip, especially if the case is complicated with myositis ossificans. In one case of the pubic type arthroplasty was attempted, but only flexion could be restored and the hip became painful after a year. In another case open reduction was done, with a similar result. The rest of the patients were treated by trochanteric osteotomy. This operation corrects the deformity and gives a painless stable hip.

TABLE I—*continued*
DETAILS OF SEVEN PATIENTS OPERATED UPON

Radiological examination	Treatment	Follow-up (months)	Result
Obturator type of anterior dislocation right hip with new bone formation in the soft tissues (Fig. 1)	Trochanteric osteotomy	48	Patient active as a farmer. Fixed flexion 25°. Trendelenburg's test negative. Can sit on the ground by compensatory movement of spine (Fig. 2). Present condition of the hip on radiological examination (Fig. 3)
Pubic type of anterior dislocation left hip	Arthroplasty. The articular cartilage was shaved off the femoral head, covered with fascia lata and reduced into the acetabulum	48	Remained free of symptoms for 1 year. Was able to sit and squat. Now getting pain on walking for more than 200 yards. X-ray shows absorption of femoral head
Bilateral obturator type of anterior dislocation with myositis ossificans (Fig. 5)	Trochanteric osteotomy left hip (Fig. 6)	39	Patient walking with crutches bearing weight on the side of operation. Satisfied with one limb straight and other still in flexion and abduction at the hip. Able to sit on the ground
Obturator type of anterior dislocation of the right hip with myositis ossificans	Trochanteric osteotomy	25	Patient active as a farmer, walks without support. Fixed flexion 15°. Limb in neutral position. No movements. Limb length equal
Obturator type of anterior dislocation of left hip with new bone formation in the soft tissues	Trochanteric osteotomy	11	Patient active again as a farmer (Fig. 7). Fixed flexion 20°. Movements nil. Limb length equal
Obturator type of anterior dislocation of the left hip with new bone formation in the soft tissues	Open reduction	11	No deformity. Pain during walking. Radiograph shows diminution of joint space (Fig. 8). Patient has not returned to his original job
Obturator type of anterior dislocation of the right hip with new bone formation in soft tissues	Trochanteric osteotomy	10	Patient active again in his work. Fixed flexion 15°. Limb length equal

Operation—The base of the neck was exposed through Gibson's approach and the femur was divided along the line joining the two trochanters. After the operation skin traction was applied for six weeks to prevent rotation deformity. Patients were allowed to walk with crutches after six weeks and full weight bearing was allowed in three or four months time.

RESULTS

Though a mild limp and marked limitation of movements persisted after this treatment, all the four patients with unilateral dislocation who were treated by trochanteric osteotomy

have gone back to their original occupations (agriculture or labour). The patient with bilateral anterior dislocation was able to walk with crutches on the treated side after osteotomy. As he is satisfied with one limb straight and the other still in flexion and abduction at the hip, enabling him to sit on the ground, he does not want the operation on the other side.

FIG. 7

Figure 7—Case 5. The sitting posture after osteotomy on the left side.

Figure 8—Case 6. Radiograph after open reduction showing diminution of the joint space.

FIG. 8

Open reduction (one patient) and arthroplasty (one patient) each left a painful hip with limited movements.

Although the number of cases in the present series is small, the authors feel that trochanteric osteotomy is the treatment of choice.

SUMMARY

1. Seven cases of old unreduced anterior dislocation of the hip are reported. Six were complicated by myositis ossificans.
2. Four cases resulted from the fall of a heavy object on the lower back of a stooping person.
3. Trochanteric osteotomy in five cases not only corrected the deformity but gave stable, serviceable hips.

REFERENCES

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