SUMMARY

1. The operative findings in seventeen cases of recurrent dislocation of the shoulder are presented and discussed. Detachment of the glenoid labrum (thirteen cases) and the formation of a posterior humeral groove (eleven cases) were the most consistent findings.

2. In one case recurrent dislocation of the shoulder was due to avulsion of the subscapularis muscle.

3. The surgical treatment of these cases is described, usually consisting of a modification of Bankart's operation.

4. The results of follow-up are given as an intermediate report. No post-operative dislocation has so far been reported.

REFERENCES


DISCUSSION
on Recurrent Dislocation of the Shoulder

Mr. A. Bernard Pain (Leeds)—I have analysed the case records in hospitals of the Leeds area of patients treated by operation for recurrent dislocation of the shoulder during a fifteen-year period. Forty-five operations were performed on thirty-three patients (one bi-lateral, seven operated upon twice, two operated upon three times). Twenty-six were males and seven were females. As to the cause, the primary dislocation occurred eight times in football accidents and six times in epileptic fits; the other nineteen were due to falls of various types, in one instance the dislocation being due to suspension of the body by the limb concerned. These cases represent the work of my colleagues and myself, and sometimes of unknown surgeons whose previous operations have failed. Three were dealt with by simple division of the subscapularis and the operation was successful in two cases. One capsular reefing succeeded. The only Clairmont operation traced was unsuccessful. Of two Bankart operations one failed and the other succeeded. The majority of the traced cases fall into three groups:

Henderson sling operation. Of thirteen fascial or tendon sling operations there was recurrence in nine. It should be noted that recurrence of dislocation took place in every single case treated by slings of fascia lata, and in four of seven cases treated by slings constructed from the peroneus longus. The Henderson sling operation is very disappointing. Of three cases operated upon for the second time—one by tendon sling for failure of a previous fascial sling, one by second fascial sling for failure of a previous fascial sling, and one by fascial sling for failure of a previous Nicola operation, the secondary operation failed in every case. Slings of fascia lata are to be condemned as being of no use, and slings of transplanted tendon are very unreliable.

Nicola operation. Twelve Nicola operations were traced. One man had the operation performed on both shoulders ten years ago and there has been no recurrence since. In three cases there was recurrence within twelve months of operation; and in a fourth case, recurrence took place as long as seven years after operation. Thus the operation failed in one-third of the cases.

Anterior bone block. An iliac bone graft has been inserted near the edge of the glenoid cavity to provide an anterior bone block in four cases. These were treated in 1944, 1946, and 1947, and in no case has there yet been a redislocation. The number of cases is small but the procedure appears to be reliable. I wish to thank my colleagues in Leeds for permission to follow up their cases.

Mr. A. S. Blundell Bankart (London)—The results of the operative treatment of recurrent dislocation of the shoulder can be stated very briefly. There is only one rational operation for this condition; it is applicable to every genuine case of anterior recurrent dislocation; it is almost foolproof; and, when it is properly done, the patient is cured—the dislocation never recurs and the patient rapidly regains full use of his arm. I have no figures; but I have probably done this operation more often than anyone else,
for I have been doing it for thirty years, and I have never had a case in which the dislocation has recurred nor one in which there was serious limitation of movement after it.

There are few operations of which it can be said that they never fail; but there are reasons why this operation should not fail. In the first place, there is a constant anatomical lesion. It is not a matter of opinion: it is there for anyone to see who will take the trouble to look for it, and it has been seen by everyone who has looked for it. Secondly, no one who has seen this lesion exposed at operation could have any doubt as to what is the right thing to do with it. The capsule or the fibrocartilage is torn from the bone and the obvious thing to do is to put it back again. Thirdly, when I say that the operation is almost foolproof, I do not mean that fools should practise surgery, but that any surgeon of ordinary competence is capable of fixing a piece of fibrous tissue to a bone when both are exposed to view and accessible, and it is difficult to see how he could fail.

There are certain technical points to be considered. First, the bone must be prepared for it, because soft parts will not adhere to unbroken or healed bone. By the same token any means of fixation is only temporary; no one can unite living tissues permanently by artificial means. All that the surgeon can do is to ensure that the parts are held together until they have united. In this operation union is complete in six weeks or less, after which the fixing agent has done its work and might just as well not be there. Indeed, the less there is of it the better.

For the actual fixation one may use sutures, nails, screws, staples, or anything. Nails and screws are makeshifts. I used staples twenty years ago, but gave them up because they were unreliable and clumsy. I believe that a single mattress suture of silkworm gut passed through the margin of the glenoid and the edge of the capsule is the simplest, the nearest, and the best. My only regret is that I did not discover the dental drill for this purpose until my second paper was in print. I have used the dental drill for nine years and it has solved completely the only difficult part of this operation.

I know that there are other operations which may prevent recurrent dislocation of the shoulder. But, when we have a safe and certain cure by an operation which practically restores the joint to its normal condition, and does the least possible damage to the surrounding parts, it seems extraordinary that anyone should go out of his way deliberately to create entirely artificial and abnormal conditions, such as slings, ligaments, tendon fixations, and bone blocks, in an endeavour to achieve the same result by roundabout means.

Some surgeons think that practically all operations for this condition depend for their success upon the formation of a mass of fibrous tissue in front of the joint—"" fibrosis of the anterior capsule and tying-down of the subscapularis." Indeed, some of the operations described seem to be designed to inflict the maximum amount of damage upon these parts, and for the same reason most of them are followed by considerable limitation of the normal movements of the joint. This is not true of my operation. Here the subscapularis is divided cleanly about half an inch from its insertion and it is allowed to retract inwards while the joint lesion is being dealt with, after which it is neatly sutured in place again. It is not ""tied-down,"" shortened, or damaged in any way.

Abnormal laxity of the capsule is the oldest conception of the pathology of recurrent dislocation and it was responsible for all the refiging, plication, and overlapping operations which proved so unreliable in the past. It is quite unnecessary to introduce such complications into the operation to-day. The only abnormal laxity which is encountered is due to the fact that the capsule is detached from the glenoid margin, so that it can be pushed forwards by the head of the humerus when dislocation occurs. This defect is remedied when the capsule is attached to the bone and dislocation cannot then occur.

It may be that in the past I have laid too much stress upon the rôle of the fibrocartilage or glenoid labrum. This may be torn from the bone, or the capsule may be torn from it. In the latter case the surgeon will find that the labrum is intact and he may not realise that the lesion has occurred immediately external to it. In my operation this is of no importance, for in every case the capsule is incised over the glenoid margin and any part internal to this (including the labrum) is excised. The outer cut edge of the capsule is then attached to the rawed bone. This disposes of any ""laxity"" of the capsule and it invariably prevents recurrence of the dislocation.

Defects in the head of the humerus probably occur quite frequently. They are due to the trauma of repeated dislocations and thus they are the consequences and not the causes of recurrent dislocation. I have seldom seen them because I have not looked for them. No good can accrue to the patient from an extensive dissection to expose such defects; nothing can be done about them if they are found; and there is no evidence that they ever interfere with the normal functions of the joint. Defect or no defect, the head of the humerus cannot get on to the anterior margin of the glenoid, if the capsule is firmly attached to the margin.

A few cases have been reported in which redislocation is said to have occurred after my operation. In such cases it will be found that the operation has not been done as I described it and in some of them an entirely different procedure has been carried out.
Mr Newman (London)—I have assisted Mr Bankart in many of these operations but when I did them myself I found them much more difficult than I had thought. The difficulty is to pull the head of the humerus laterally, far enough to see the front of the glenoid. The solution is the Bankart skid, put through the joint so that the head of the humerus is levered away. The drill holes can then be made easily and the operation is simple.

Mr Osmond-Clarke (London)—in reply: Mr Bankart has made a devastating attack. We looked forward to it eagerly. One thing I must ask him to do—and his colleagues. We want to hear what number of cases have passed through the Middlesex Hospital and what number of lesions of the glenoid labrum have been seen. Surgeons have been looking for this lesion, and although they may often find it they fail to find it in ten or fifteen per cent. of cases. These are reputable surgeons. Some operation must be devised for the cases in which there is no detachment of the labrum to be stitched back.

I have assisted Mr Bankart myself and I have watched many surgeons since—distinguished, mildly distinguished, and undistinguished. I have seen every conceivable form of trauma applied to the anterior margin of the glenoid; and I have seen a surgeon, after operating for one hour, faced with total disappearance of the bone surface he has been trying to drill.

For these two reasons I urge the claims of an easier repair which provides a sufficient block in front of the joint, and at the same time limits external rotation movement so that the bone defect in the head of the humerus cannot engage the glenoid margin.

Mr George Perkins (President)—The only thing I want to say is that it has been a great pleasure to find younger contributors speaking to us and not reading their script. We expect that from a doddering old professor like Nobby Clarke but it is good to see more youthful members presenting their work so well.

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