Occult anterior subluxations of the shoulder in noncontact sports*

WILLIAM P. GARTH, JR,†‡ MD, FRED L. ALLMAN, JR,§ MD, AND WILLIAM S. ARMSTRONG,§ MD

From the †Kerner-Quarterback Sports Medicine Institute, University of Alabama at Birmingham, Birmingham, Alabama, and §The Sports Medicine Clinic, P.C., Atlanta, Georgia

ABSTRACT

Athletes participating in noncontact sports involving abduction and external rotation of the shoulder (e.g., throwing) may develop occult recurrent subluxation manifested only as pain. The lack of contact trauma preceding symptoms, the failure of the athlete to appreciate the instability, the relative rarity that the lesion has been previously recognized and reported, and the lack of objective evidence of instability often lead to incorrect diagnosis by the physician.

We report 30 shoulders in 28 patients with this lesion. Nineteen of these patients had been originally seen by other physicians prior to presenting to us and misdiagnosed. The newly described apical oblique roentgenographic projection revealed Hill-Sach's lesions in 23 of 28 patients in this series. In addition, two of the five patients without Hill-Sach's lesions had bony changes pathognomonic for the Bankart lesion on the apical oblique projection. A total of 25 of the 28 patients had objective roentgenographic evidence of previous anterior subluxation. Eleven of the patients had arthroscopic examinations confirming various pathology consistent with anterior subluxation, including anterior or inferior labral tears, Hill-Sach's lesions, anterior inferior glenoid articular cartilaginous erosion, or Bankart lesions. Two of the twenty-eight patients had pathology in addition to evidence of previous occult subluxation which may have played a role in their symptoms, one having had osteolysis of the distal end of the clavicle and another having subacromial adhesions.

Noncontact sports activities requiring repetitive and vigorous abduction, external rotation, and extension of the shoul-

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† Address correspondence and reprint request to: William P. Garth, Jr., MD, Kerner-Quarterback Sports Medicine Institute, The Children's Hospital, 1600 7th Avenue South, Suite 254, Birmingham, AL 35233.