Arthroscopic Evaluation of the Shoulder Instability

Koh Maruyama, MD

Department of Orthopaedic Surgery, Nihon University School of Medicine

Association of multidirectional instability(MDI) one of pitfalls on the treatment of posttraumatic recurrent anterior instability(PTRAI) because it may be a cause of recurrence postoperatively and it is not so easy to assess by clinical test practically. Pupose of this study are to make clear the rate of its association and to introduce our approach to it.

103 out of 153 cases of PTRAI were subject to this study. They consisted of 89 men and 14 women, aged between 16 and 58. The sulcus test and the drawer tests without anesthesia, and the stress translation tests during scopic examination under anesthesia(EUA) were achieved in all cases prior to surgery.

During EUA 96% do them showed grade 2 or 3 anterior and inferior translations respectively. Conversely 85% of them showed minimum translation posteriorly. It is worthy of our notice that 65% of the total revealed downward instability with a grade greater than 2 in EUA 11 joints revealed more than grade 2 translation in three direction in three directions in EUA but 9 of these 11 joints behaved false negative by clinical tests without anesthesia. These nine joints could be called "concealed MDI" which occupied 8.7% of the total

MDI is thought to be atraumatic factor of the shoulder joint and to have nothing to do with PTRAI. However, we have experienced not a few cases of PTRAI combined with MDI. About two-thirds of this series had two-directional instability and about 10% of 103 joints had three-directional instability. Then, we believe that MDI is not so rare among PTRAI as ever thought.

From the results above we should emphasize that approximately 10% of PTRAI is associated with MDI and "concealed MDI" occupied 8.7% of the total. EUA should be done to rule out it prior to surgery.