

The aim of this study was to analyze the characteristics of external shoulder rotation during pitching ~~shoulder external rotation during pitching in in 13~~ female university baseball players. ~~The subjects were 13 female university baseball players.~~ Three-dimensional motion analysis was performed to obtain the ~~maximal~~ external rotation (ER) angle of the glenohumeral joint and the posterior tilt angle of the scapula at maximal external rotation (MER) of shoulder complex. ~~angle of the shoulder complex during pitching, the glenohumeral joint external rotation angle during MER, and the scapular posterior tilt angle during MER.~~ The mean MER angle was  $131.0 \pm 9.3$  degrees. The mean glenohumeral joint external rotation angle during MER was  $90.6 \pm 11.4$  degrees. The mean scapular posterior tilt angle during MER was  $37.1 \pm 5.2$  degrees. The MER angle and glenohumeral joint external rotation angle of female baseball players in this study were smaller than the reported angle in male baseball players by Miyashita et al. (2008). Conversely, the scapular posterior tilt angles of female the subjects in this study was larger than the angles observed in male players in the same previous study. Our hypothesis is that the high flexibility specific to females does not reflect shoulder external rotation angle during pitching. In the meantime the scapular posterior tilt angle was large, and sex differences were observed in the composition of ~~shoulder~~ external shoulder rotation during pitching.

**Comment [Checker1]:** [Level 2]

[Technical Word choice][SME]  
A widely used technical term was used

**Comment [Checker2]:** [Level 2]

[Other Language][LAN]  
The sentences were clubbed together to avoid redundancy

**Comment [Checker3]:** [Level 2]

[Other SME][SME]  
The entire sentence was rephrased for better technical accuracy and clarity

**Comment [Checker4]:** [Level 2]

[Omission][ULA]  
The scientific convention was missing

**Comment [Checker5]:** [Level 2]

[Clarity][LAN]  
Introduced clarity

**Comment [Checker6]:** [Level 2]

[Consistency][LAN]