Abstract

Title: Stability of motion for softball pitcher by kinematic analysis

Objectives: The aim of this work was to analyze the motion of softball pitch. We tried to compare and find differences between four kinds of the pitch.

Methods: In our thesis we used 3D kinematic analysis to collect data. We used the system Qualysis. High – frequency cameras recorded 32 pitches from the male Czech pitcher and then analyze in specific software.

Results: We found out that motion of the pitches are not very different from each other. Only change up is significantly different from other pitches, but still batter is not able to recognize, which kind of the pitch is pitcher going to use.

Keywords: fastball, raiseball, dropball, change up, biomechanic of motion, 3D analysis, Qualisys