

Abstract

- **Headline:** Kinesiology analysis of activities sampled muscular groups during overhead throw and pitching at softball.
- **Aims of thesis:** I will make kinesiology analysis and compose framework coordination map of sampled muscles groups which working during overhead throw and softball pitch.
- **Methods:** Surface electromyography (SEMG) measure in combination with simple kinematics analysis.
- **Results:** They showed the different between the techniques each kind of throws and especially different in activation of main muscles groups. They can be used for comparison with other studies.
- **Key words:** softball, rotation motion, muscles chain, electromyography, overhead throw and softball pitch