

Domino Effect of Injury

The impending doom the final domino faces when the first domino takes its' first victim upholds a similar, not as dramatic, effect of musculoskeletal injuries. For example, Jimmy's novice pitching coach instructs him to throw 150 pitches in the bullpen before the first inning. Inevitably, his repetitious patterns will elicit a level of stress and injury thus resulting in an adaptation to the specific site. Although, sport-specific adaptations not only alter strength, flexibility and posture at the specific site, but other links of the kinetic chain. The 'other links' don't adapt to the load, but experience relative weakness. For example, Jimmy experiences loss of glenohumeral internal rotation range of motion, then his rotator cuff experiences a loss of external rotation strength, now his thoracic spine stiffens, ect. The same ideology can be applied to Runner's Knee, ACL injuries, Tennis Elbow or Tommy John.

Take home message: During an injury, muscle recruitment alters in attempt to compensate for deficits. During an anterior shoulder injury, the supraspinatus begins to tap out while the infraspinatus takes over both consciously and unconsciously in avoidance of pain.