Management of Sports-Related Concussion

Concussion or mild traumatic brain injury (MTBI) is a common injury in contact/collision sports, especially football and ice hockey. Recent research in the area of sports-related concussions has lead to significant changes in the way medical personnel evaluate and treat student-athletes with concussions. The Maine Principals’ Association ad hoc committee on sports medicine is currently reviewing recent recommendations put forth by the National Athletic Trainers’ Association (NATA) and the National Collegiate Athletic Association (NCAA) for evaluation and treatment of sports-related concussion, and is in the process of revising the MPA’s position statement on sports-related concussion. Several important points will be highlighted in the revision, including:

1. The term ‘ding’ or ‘bell ringer’ has no role in the description of a concussion. Evidence shows that athletes with even mild concussions will demonstrate symptoms and memory deficits thirty-six hours or longer after their injury. Therefore, if an athlete reports symptoms and exhibits concussion-like signs after a blow to the head, they should be treated for a concussion and not be allowed to return to play in that contest or practice. (Lovell, et. al., Amer J Sports Med, 2004)

2. It has been shown that loss of consciousness (LOC) does not correlate with the severity of the concussion. It is now felt that retrograde amnesia (loss of memory prior to the hit) and post traumatic amnesia (loss of memory after the hit) are more sensitive indicators of severity of injury. Recent grading systems for concussion attempt to take this into account. These grading systems may be useful, but it is important to remember that concussions need to be treated on an individual basis, preferably with neuropsychological testing. (Concussion in Sports Group, Vienna 2001, Clin J Sports Med, 12:6-11, 2002.)

3. Athletes should not be allowed to return to play (RTP) after a concussion until they are symptom free and their cognitive functions have returned to baseline. The RTP decision should be made after the athlete has undergone step-wise incremental increases in cardiovascular and sport-specific challenges which do not place the athlete at risk for a subsequent concussion.