



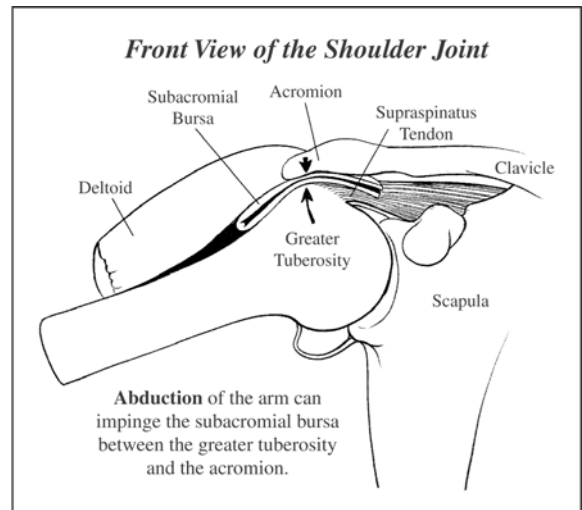
8 Common Weight Lifting Mistakes of the Overhead Athlete

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An overhead athlete is anyone who participates in sporting activities where the arm is abducted and externally rotated. For example, this would include throwing a ball, all serving motions, swimming, and golf. The following information is also essential for those who wish to maintain a healthy shoulder (Glenohumeral Joint) while maintaining a weight lifting program. Additionally, people who run and cycle should also avoid the subsequent exercises:

1. No straight bar bench-pressing of any kind. The shoulder (GHJ) is not a weight bearing joint like the hip or knee. It is designed for *mobility not stability*. Consequently, bench-pressing hundreds of pounds weekly, over a period of years, causes an increase of bony overgrowth leading to spurring, decreased joint space and a tight shoulder capsule. Typically, weight lifters like straight bars because they can often lift two or three times the amount of weight they can lift using dumbbells in a comparable movement. Dumbbells should be used for all chest-pressing movements lowering the weight only until the upper arm and lower arm are perpendicular to one another.



2. No overhead straight bar pressing in the front or behind the neck, because this is damaging to the cervical spine and the GHJ. This movement has no direct performance enhancing qualities and has the same damaging mechanics as the pressing motions aforementioned. However, dumbbells can be used for overhead pressing motions provided the weight is only lowered until the elbow forms a 90-degree angle, and the upright bench is 10 degrees past perpendicular. Not using a straight back bench allows the Greater Tuberosity of the Humerus to clear the Acromion thereby greatly reducing the chance of secondary impingement.

3. Never use a smith machine. This piece of equipment allows the use of significantly more weight by attaching a straight bar to a set of poles which stabilize the weight for the lifter. This stresses the primary muscles and weakens the stabilizers, because the machine does all of the stabilizing work. This may facilitate a muscular imbalance establishing altered mechanical movement patterns. In an overhead athlete these altered mechanics will lead to a decrease in performance and ultimately injury.

4. Absolutely no behind the neck pull-downs. This exercise forces the cervical spine to flex forward and both shoulders to abduct and externally rotate while pulling weight down. This combination strains the cervical muscles, puts the cervical disc at risk and poorly isolates the Latissimus Dorsi (LD). There are other safe and effective ways to work the LD.

5. Upright rows are damaging and do not increase on field performance. This is a bodybuilding type exercises that is supposed to create overall Deltoid development. What it really does is abduct and

internally rotate the Humerus causing the Greater Tuberosity to impinge or grind upon the inferior angle of the Acromion. This impingement may cause an Osteophyte and/or a Supraspinatus tear (Rotator Cuff). Either way, depending upon the severity of the tear or the pain, these are often surgical conditions.

6. Never perform any kind of dip. This is one of those ancient exercises that compress the GHJ, often damaging the cartilage and Labrum. The next time you are at the gym, just look at the shoulder of someone performing dips. Generally, you can see the Humeral head shifting back and forth in the anterior compartment as the weight is raised and lowered. Once again the GHJ is not a weight bearing joint, yet people continually perform dips using body weight or more. They claim it really works the Pectoralis Major, Anterior Deltoid or the Triceps, but these muscles can be safely and effectively worked in other ways.

7. Neglectfully or incorrectly training the lower extremities. Most overhead athletes skip legs at the gym, distance train (run 1k and over) or perform isolated two-legged exercises (leg extensions). These athletes should be doing explosive compound exercises such as squats, sumo style dead lifts, one arm snatches and reverse hyperextensions. They should also perform as many single leg exercises as possible, such as leg press, step-ups, lunges and standing leg curls. The aforementioned exercises should be done in the 4 to 6 repetition range with as much load and that *strict form will permit*. If you are a runner or an aerobic athlete these are great exercises, but the load and repetitions are different.

8. Improperly training the rotator cuff muscles. The Supraspinatus, Infraspinatus, Teres Minor and Subscapularis are the muscles that form the rotator cuff and all of them must be trained with specific exercises at various angles. Many athletes simply do not train their rotator cuff. Professional baseball pitchers train their cuff daily, at a submaximal effort and with a maximum of 5 lbs for 30 repetitions of various exercises. Those of you at the gym currently doing your rotator cuff exercises with 10, 15 and even 20 lbs are just damaging these muscles.

Remember, weight lifting for the overhead athlete is intended to enhance performance on the field and minimize damage caused at the gym. If you are lifting weights for other reasons, such as bodybuilding or power lifting, the long-term health of your shoulder (GHJ) is at risk for Osteoarthritis. If you are in the later category, a well-balanced rotator cuff program is necessary to help minimize the damage to your Glenohumeral Joint. If you are somewhere in the middle, these guidelines can prevent you from damaging your shoulder, thereby allowing you to lift weights for years to come

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