Mike's Tennis Corner The Overhead: An Ultimate Weapon By: Michael R. Lowdermilk 480-628-0851 (M) tennislessonsaz@gmail.com www.tennislessonsaz.com

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When executed properly the overhead can be an ultimate weapon. Conversely if your technique is poor and you hit a weak overhead, your opponent can gain both a strategic and psychological advantage changing the whole outcome of the point. This can be very frustrating and result in a number of easy points lost rather than a number of easy points won. That's why it is so important to understand the biomechanics of an effective overhead. Similar to the serve, a successful overhead consists of key ingredients or component parts.

1) **The Stance and Early Preparation:** As soon as the net player determines that a lob is on its way, the net player should turn sideways. Some players face the net in preparation to hit an overhead. The disadvantage to this technique is that there is virtually little weight transfer. The advantage to adopting a closed stance on the overhead is that it helps provide greater weight transfer, trunk rotation and, as well know author and coach, Jack L. Gropple, points out, greater 'ground-reaction force'. Much like Newton's Third Law that states that for every action there is an equal and opposite reaction, this ground reaction force refers to the pushing off force, (pushing off the court), that contributes to the generation of power on the serve. This will be discussed in more detail later.

2) Hip and Trunk Rotation:

As indicated above a successful overhead depends, in large part, on a pushing or thrusting off from the court with the legs. This is a link in the kinetic chain that powers both the serve and the overhead. When the net player is positioned to hit the overhead, his weight is on the back foot. As he transfers his weight forward, upward and outward toward the ball, the knees begin to uncoil, and then the hips begin to turn. The upper body or trunk continues to rotate up and out toward the ball followed by the shoulder turn and pronation until the ball is finally hit.

- 2) The Point of Contact and Positioning to the Ball: At the same time that the net player turns sideways, he should use his non-racquet arm to point toward the oncoming lob. The non-racquet arm serves as a means to track and position to the ball. It can also be used to block the sun and to help ensure that the net player is sideways. Assuming the net player is right-handed, the net man should use his left arm to point at the ball and position his body to contact the ball at One O'clock. When moving up or back to retrieve a lob, the net player should be lightly on the balls of his feet and use a side step shuffle method to intercept the lob. Once he is positioned properly, the net player should swing upward and outward toward the ball, similar to a throwing motion in baseball.
- 3) Grip and Pronation: The most effective grip to use at the net is the continental grip (half way between the eastern forehand and eastern backhand grips). This grip enables the hand and the forearm to pronate simultaneously adding additional power to the serve. Pronation is the turning outward motion of the arm. If you are right-handed the arm will pronate outward from left to right. If you are left-handed, the arm will pronate outward from left to right. If you are left-handed, the arm will pronate outward from right to left. Some students of the game refer to this as a 'wrist snap'. Others refer to it as a wrist role. Groppel's research in '*Tennis for Advanced Players and Those Who Would Like to Be*' suggest that the wrist actually hyper-extends as the forward swing begins. He also notes that the wrist flexes from the hyper-extended position through to the impact point. Irrespective of terminology or semantics, pronation is a key ingredient to generating pace on the serve.
- 4) Weigh Transfer to Follow-through: After you have made contact with the ball, the weight continues to transfer forward and the racquet continues across the body to the follow-through position. If you are right handed the racquet will finish across the left side of the body. Here the wrist will pronate along with the hand and forearm and will actually finish up against the left thigh as if you were putting a sword into its sheath. The important this is that you actually continue transferring you weight forward, upward and outward toward the ball. And remember to keep your forehead up as well.

In summary, if you can consistently incorporate all these ingredients into your overhead, you will be well on your way to winning more easy points and adding more trophies to your collection.