



WHEELCHAIR COACH

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GET A GRIP

One of the many challenges facing Quad players (and their coaches) is how taping impacts a player's technique.

Fastening the hand to the racquet means only one grip will be available for the whole time. So which one do you choose? Each of the major grips have their own advantages and disadvantages. Let's look at the two most popular taping options:

1. Taping in a Continental Grip:

Advantages:

- Both forehand and backhand can be performed with equal strength.
- Underspin shots are readily available since a continental grip creates a slightly open racquet face angle at impact.
- On overhead shots (serve & smash), a continental grip allows more forearm pronation so there is good potential for power.

Disadvantages:

- Although all shots are available, topspin is more difficult to produce because of the racquet angle. Without topspin it is harder to control power shots. The result is continental players tend to not have 'weapons' or extreme angles.
- It is also a little harder to push with a continental grip so mobility may be effected slightly.

2. Taping in an Eastern forehand or Semi-western forehand grip:

Advantages:

- More topspin is available on the forehand so it can be hit with more power without losing consistency.
- The topspin allows more angles to be created on the forehand since the ball can be made to 'dip' more.
- On the forehand, high looping topspin balls that make opponent's impact at shoulder height or above are easier to perform.
- A semi-western grip allows for maximum contact on the wheel (or push rim) so a player has the potential for a stronger push.

Disadvantages:

- The backhand is more difficult to control because of the more extreme racquet angle.
- It is more difficult to spin serves and pronate the forearm.

WHICH ONE?

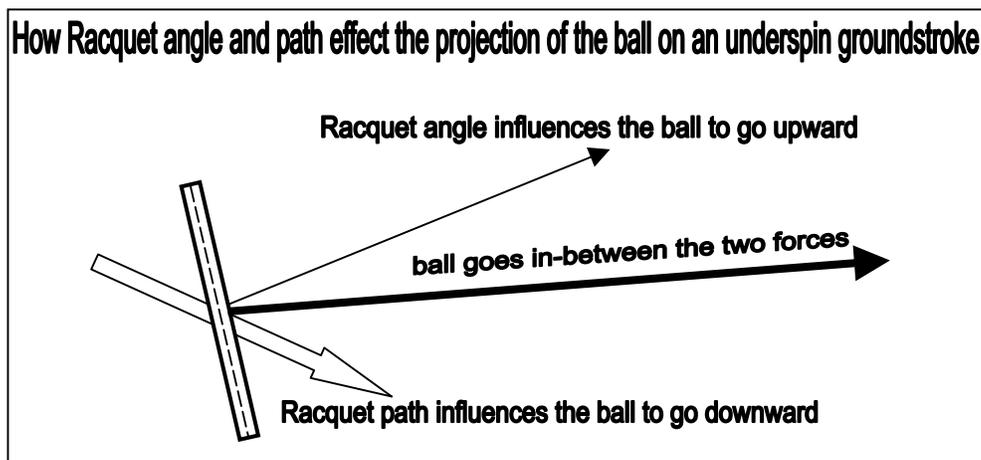
For beginners, it may be a good idea to tape continental. However, if they are on track to become a competitive player, a switch after years of practise may be difficult. In the end, the player and coach will have to choose an option that capitalizes on the players individual style and strengths. The two players I have the honour to work with (Sarah Hunter and Brian McPhate) both have chosen taping a Semi-western forehand. The reasoning for them is that it was more of an advantage to have a forehand that could be used to gain points and keep opponent's under pressure with power or angles. It was also better for their mobility to be able to push harder. The disadvantage of the lack of pronation on overhead motions wasn't a factor since their lack of function in their racquet hands & wrist didn't allow for effective pronation anyway.

Since topspin is very difficult to achieve with that grip, the goal became to create an effective underspin groundstroke, one that doesn't pop-up, float, or 'plop' into the court weakly. There are many advantages for a wheelchair player to master an underspin backhand, none the least of which is being able to impact in different places (e.g. a little late, jammed, low, etc.) and still make an effective shot.

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BACKHAND TECHNIQUE

Technically, the determining factors involved in sending an underspin backhand are the *racquet angle*, the *racquet path* and the *racquet speed*. To illustrate this, let's look at an underspin shot and the forces that interact between the racquet's angle, path and speed. It is true that the ball received plays a role, but for this article, we will restrict our discussion to the ball projected.



It is important to note that the Racquet speed plays a significant role. Increasing the speed will make the influence of the racquet path more dominant than the influence of the racquet angle.

Whether taped in a continental or forehand grip, the angle of the racquet becomes more of a constant. In other words, it is more difficult for the player to adapt the racquet angle when the racquet is fastened to their hand. It is possible to adjust the wrist to change the angle, but the trade-off is a weaker biomechanical position which may lead to inconsistency or even injury.

SO WHAT?

Like all technical information, a coach must know how to apply the physics for it to become useful to the player. The important variable when the hand is taped becomes the racquet path. **To command the trajectory of the ball, a player must learn to use the racquet path as the controlling factor.**

TRAINING BY FEEL

Coaching kinesthetically (helping a player feel how their body moves) is a powerful tool in this process. Players must be able to feel variations in the racquet path (e.g. when the path is level, or high to low, and how steep). This is critical since, the player must create the appropriate racquet path for every shot. Not being able to feel what is going on means the player will not be able to modify the path accordingly. Once a player is able to kinesthetically feel how to control the racquet path, they are well on their way to having an effective backhand.



Sarah getting racquet path information prior to taping

Train the kinesthetic feel by letting the player experience the different paths. Let them see the different results of each path. Remember to keep the racquet speed up or the ball will 'pop-up' or 'float' because the slightly open racquet will dominate the ball.

CONCLUSION

Choosing a grip to tape is a tactical choice that produces technical limitations. No matter which grip is chosen, a coach can minimize any limitations by knowing the factors that control the ball (Racquet Angle, Racquet Path, and Racquet Speed), and training a player to kinesthetically feel how to manipulate them.

If you would like to ask a question, give feedback, or want more information, contact us at:
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