The Side Plank: What are you training?

The side plank is a commonly used exercise within the strength and conditioning/training world. Although used extensively I feel sometimes we are missing the point as to why it is in our programs and what potential benefits the exercise is having.

The exercise is predominately used as a lateral trunk strengthening exercise to develop internal and external oblique muscle strength by oppossing lateral trunk side flexion due to gravity. Subjects must show adequate lateral hip strength to prevent the hips dropping. This is particulary so when the feet are positioned on top of each other as in the photo below.

Below in the picture is the traditional style side plank exercise.

Traditional style side plank

One of the main concerns of the use of this exercise is that it is often completed incorrectly. In relation to performing the exercise incorrectly the following problems are often evident:

- **Subjects breathe incorrectly**: Either hold their breath or breath apically (use accessory muscles such as the scalenes, sternocleidomastoid to dominate rather than the diaphragm).

- **Hold for a length of time**: Rather than use diaphragmatic breathing cycles subjects often hold for a set time period. Quite often this time period is not reflective to the subject conducting the exercise and as a result is often not long enough or too long and the quality of exercise is reduced.

- **Subjects fire incorrectly**: Probably the hardest to observe, some subjects will use the wrong muscle recruitment patterns to complete the movement. For example an athlete may dominant using the quadratus lumborum (QL) to stabilise instead of the intended internal and external obliques. I am not saying that the QL should be silent as it will need to fire to stabilise, what I am saying is that at low to moderate loads the obliques should be dominant. Get your hands on your athletes as they perform the exercise to see what is working.

If you are seeing a tendancy of over dominance of the QL I like to change the foot position, so the foot of the the top leg rests on the floor. This is shown in the picture below.

Side Plank: Core bias

I feel this position generates less demand on the hip stabilisers and enables greater 'activaton' of the obliques and the adductor on the top leg. By activation I dont mean that there is overall greater muscle recruitment, as in comparison to the traditional side plank there is probably less as this exercise is slightly easier. However, we are getting less recruitment from high threshold muscles like the QL and more isolated recruitment of the obliques and adductor.

In summary think about what you are using the side plank to train and consider varying position to activate the structures you want to activate. In addition, consider using diaphragmatic breathing cycles instead of time to facilatate greater core recruitment.

Have a go at the two variations and let me know what you think.

Cheers for reading

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