

The Overspilt Leg Mount



One particular stretch that is has been popping up more and more on our Instagram and Facebook feeds that has us very, very worried, is the overspilt side mount. Young dance students are taking the leg past its natural range of motion, and often right behind their neck or upper back. We are concerned that the student, their parents or even their teachers do not fully understand the risks that are involved with repeatedly performing this particular move. In the clinic at **Perfect Form Physio** we are seeing more and more hip injuries related to this kind of over-stretching, and so we wanted to write an article explaining exactly what is going on in the hip joint, so that everyone has more information and can train more safely.



1. Why are you doing it? The first question we need to ask with any kind of risky movement is “Why are we doing it?”. Is it part of your staged development along the way to becoming a professional dancer? Is it just another tick on a list of tricks? Is it necessary for a certain piece of choreography, and are there any other safer ways of developing the artistry and technical mastery of the piece without such dangerous tricks? This is a huge question, and not one we will go into a lot here, but it’s definitely something to think about.

2. Is it necessary? We also need to ask if this position is actually necessary for young dancers to be doing. Yes, flexibility is important, but if you are planning on a career as a professional classical dancer, this is definitely not in the list of required positions to master! If you are aiming for Cirque du Soleil or another circus group, it may be a little more relevant, however, if you damage your hips doing this when you are 13, then the likelihood of any kind of performing career is going to be diminished.

3. What are the risks? The main thing we want to discuss in this article are the risks associated with this position and what is actually happening inside the hip joint. Damage to the hip joint while you are growing can mean long term issues in this area, and may actually prevent you from doing what you are trying to achieve long term. Many people I talk to about this particular position have never really thought about what is going on inside the joint, and are under the impression that if it doesn’t hurt, then it’s ok. This is not actually true, and I will try to explain why.

The Anatomy

The thing that many people don't realise is that there is a ligament that attaches from the ball at the top of the thighbone into the hip socket. It is called the **Ligamentum Teres** or **Round Ligament**. It is partially involved in the stability of the hip joint, but also carries a blood vessel that supplies blood to the head of the femur (thigh bone). When you take the leg into a full side mount and then add on a side tilt, or take the leg behind your head, this ligament is taken in to a fully stretched position. If this is done forcefully, repeatedly, or without control, the risk of ripping this ligament is high. If this ligament is ripped, surgeons don't tend to reconnect it. They may tidy up the ends but may not join the ends together. This means that the stability and blood supply to the head of the thigh bone (femur) may be reduced.

The reason why some people find this movement very easy may be due to the possible anatomical variation of not having this ligament. Research suggests that this is due to the ligament being ruptured very early in life. In this situation the alternative blood supply to the head of the femur will help it grow, but the head of femur tends to be small within a normal sized socket. In this situation, it is even more important that the dancer learns how to carefully stabilise the hip using the deep small muscles that surround the hip to reduce wear and tear on the cartilage and avoid long term damage.

If this ligament is ripped in the teenage years, when the head of the femur is used to having a good blood supply, this is the most disastrous. The bone can become weakened and in some cases may collapse due to necrosis. If the ligament is ruptured in adult life, once the head of the femur has fully developed, it seems to have less immediate impact, however we have no research on the long term implications of this.

The other issue with forcefully grabbing the leg and taking it behind your head is the risk of damaging the **Labrum** of the hip. The Labrum is a ring of cartilage that helps make the hip socket deeper, and helps hold the head of the femur in place. A good way to imagine this is to visualise a Calamari ring sitting around the edge of the hip socket. If the leg is pulled behind the head, the top part of the labrum can get squashed and this may result in damage to the Labrum. Often this does not happen all at once, but is a process of accumulated damage resulting from multiple compressions over time. This is why dancers often don't feel anything for months, and then suddenly get hip pain doing something completely normal. A labral tear can put you out of dancing for several months, and may require surgery to fix. The rehab is long and slow, and its far better to avoid damaging this part of your hips!

4. What should you do instead? I have absolutely no aversion to developing extraordinary range of motion in the hips as long as it is with control. Mobility should also be developed in all directions, and be done with respect for the tissues that are restricting mobility, rather than simply forcing it into range. For instance, some students will be blocked by tight muscle, some by fascial tension, and some by the bony shape of the joint. It is important to understand the make-up of your own hips and safe ways of improving range as well as strength.

If you have any questions about specific stretches, or you would like to learn how to get more mobility safely, please feel free to contact us at **Perfect Form Physio** on (02 9922 7721). We work closely with dancers all the time - so we know what your needs are, and can help you find safer ways to improve your mobility and technique!

For more information about how to improve your mobility safely, please check out our **Front Splits**

Fast Flexibility Program. Details on this and all our other programs can be found at:

www.theballetblog.com or www.perfectformphysio.com.au

