

## Climbing and pregnancy

A quick Google search will reveal more than this article can deliver but the overarching message from forums and anecdotal accounts is that physical exercise is beneficial both to mother and baby but very much depends on the individual, if in doubt discuss any issues with a GP.

As a professional you probably need a little more of a definitive answer – this article focuses on physiological changes during pregnancy that could increase the likelihood of injury and how you can continue to work with your clients whether you are pregnant or they are.

Pregnancy is divided into trimesters, each of 3 months in length. Generally the 1<sup>st</sup> trimester is a period where there are very few physical limitations to exercise but increased nausea, lethargy and subsequently motivation. During the second trimester there are significant physical changes but generally the mother feels well and is able to continue with exercise. The third trimester is a period of great stress mentally and physically and a great degree of caution should be applied when engaging in exercise. However there are many accounts of people running marathons and climbing mountains only days before giving birth.

A return to exercise after birth is also important and an important factor to consider is whether the mother is breast feeding.

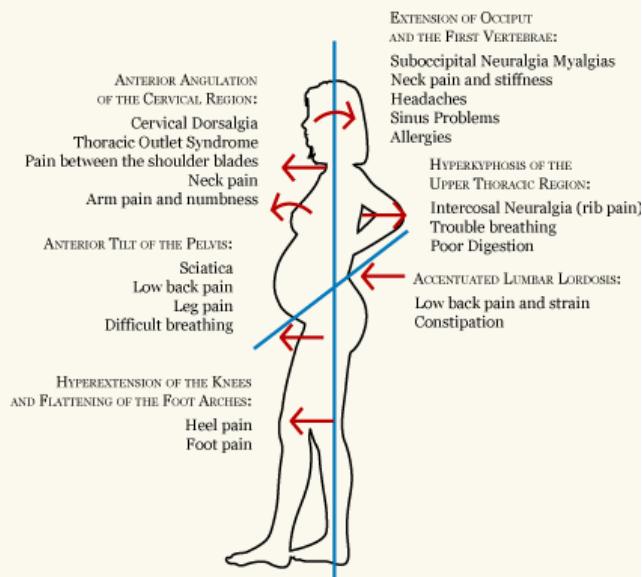
First, a few fundamentals:

- When pregnant there is increasing demand on the heart (up to 50%). Take care to moderate exercise intensity accordingly as pregnancy progresses.
- With exercise comes an increase in body temperature which makes the baby uncomfortable – regulate this carefully.
- Damage to the foetus could potentially be caused by the wearing of a waist harness and/or falling on the lead (or on a slack rope). Be careful to adapt the harness or change to a full body harness and monitor rope work closely.
- Same goes for bouldering – risky.
- The hormone 'relaxin' causes ligaments to become looser to aid birth. This can leave women susceptible to joint injuries but it does improve flexibility.
- 2 out of 3 pregnant women acquire some form of lower back pain (LBP). Ensure the root cause is established before exercising.

Postural changes occur to accommodate the developing foetus and cause the muscles to adapt and change length which is further exacerbated by climbing. The pelvis tips forward and this, in turn causes a sharper arch of the lower back which subsequently means there is a tendency for the upper back and shoulders to become more curved and rounded, this is already common in climbers (see previous articles).

The latissimus dorsi (lats) may also become shortened due to reduced exercising and its role in providing support between the spine and the pelvis and its relationship with your quadratus lumborum (QL) in your lower back.

As well as this there might be shortening of the quads and hip flexors as the pelvis tips forward – this particularly makes free movement, especially high stepping quite difficult.



Maintain exercise levels as much as practicable and incorporate stretches *prior to exercises*.

Careful stretching during pregnancy will serve two purposes however; one, it will determine the joints range of movement and allow you to see if this is changing at all and two, it will prepare the joints for moving into this 'new' range (*as one would do on a ordinary pre-exercise mobility routine*).

The pelvic floor also comes under a lot of extra pressure during pregnancy (and climbing, funnily enough). It seems counter-intuitive to combine the two but exercise in general contributes to improved strength of pelvic floor muscles and climbing can be seen to further enhance this; climbing (like Pilates) is a process of moving between and maintaining a sequence of static positions. This 'isometric' muscle contraction builds muscle more quickly than regular shortening (concentric contractions) (again, see previous article) and puts less stress through the body (Pilates is also highly recommended for fitness during pregnancy).

As climbers we rely on our grip strength but what we often mean by that is not the muscles in our forearms but the strength of our ligaments to hold our joints together as we grip onto a hold. This strength, particularly in our fingers takes months or even years to develop but a lot less time to lose. As already mentioned it is especially important to be aware of joints as they move into the end of range – it might be possible to suffer a dislocation as there will be less warning signals to limit your movement.

Avoid 'technical' moves and stay well within a comfortable grade and crimping, finger locking, micro-pockets and thumb spragging are all best avoided.

So, whilst all this might just sound like it is limiting your options to easy grade top-roping remember, it is your job to make it interesting for yourself as well as your client. Know your climbs – check them out prior to work; are there any high steps, crimpy edges, dodgy mantles? Try throwing a rope down some high ball boulder problems which you have always meant to give a go but have never found a mat big enough. Seek out those more esoteric climbs which have 'traditional' and 'sporting' in their description.

Most importantly do not shy away from either the sport or the subject as communication and trust is essential to safety.

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