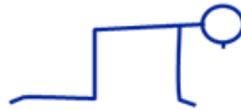


Cat and beyond

SWYA on-going training workshop for yoga teachers

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Workshop notes by Andrea Newman www.yogaandrolfing.co.uk



Coming onto hands and knees brings us into the cat position, or ‘all fours’ position, sometimes known as the ‘table top’ position. It is an interesting pose in itself, as well as being a useful start position for many yoga asana.

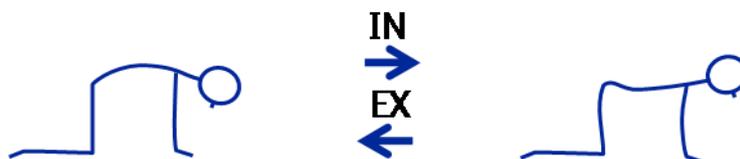
Child development

In our early development we were familiar with this position, most tots discovering the all-fours position as a prelude to crawling and standing. You can often see little ones rocking backwards and forwards on all-fours. So it isn’t completely unknown to our bodies, but may have become unfamiliar due to lack of use.

Out of gravity

Coming into a static cat pose as adults, as pictured above, we have taken the spine out of the line of gravity, perpendicular in fact to the direction of force. Not having to hold itself vertical, the back muscles that support the spine are more relaxed. The spine is horizontal, suspended at both ends through the shoulder girdle and pelvic girdle. We need to stabilise the spine a little here, otherwise it would sag down into extension, but it takes much less muscle contraction than it does to support an upright spine. For this reason, spinal mobility exercises are more easily accessible from this position, which can be helpful for some people with lower back pain and for pregnant women.

The classic cat stretch exercise

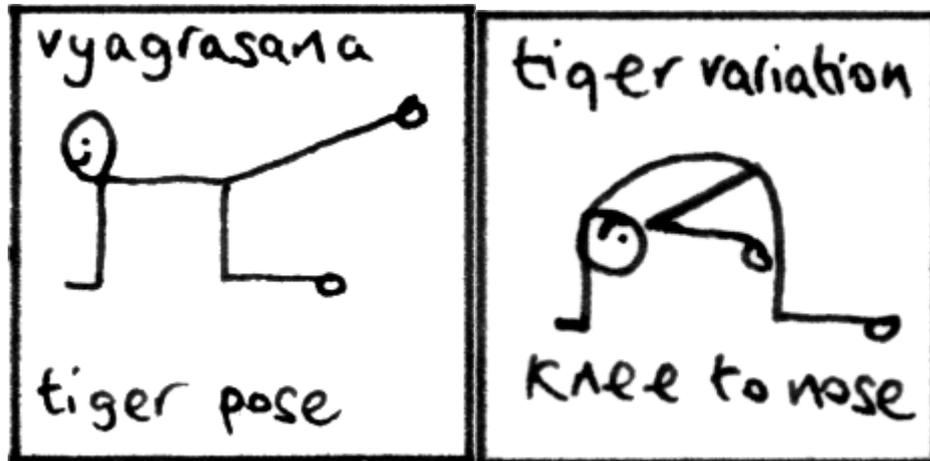


The well-known and well-loved ‘cat stretch exercise’ is an excellent way to mobilise the spine. It’s also a great way to ease out at the end of a practice or as a transition between poses, or on its own for a quick practice when you only have one minute spare and a yoga mat at the ready.

For the exercise we take the spine into extension and then into flexion, alternately, keeping the arms straight and maintaining our square position. Only the spine moves, articulating at the shoulder and hip joints. If we avoid rocking backwards and forwards, we can isolate and focus on the movements of the spine and the girdle joints, mobilising exploring the actions there.

Anyone with laxity of the ligaments – during pregnancy, while lactating, and during the post-natal period, and also caused by ageing – the spinal extension can be left out, coming back to a flat back position instead, so you still get the benefits of the flexion stretch.

Adding a leg movement can be a progressive step on from the basic exercise.



Anatomical variation

Some people have long arms and short thighs, or vice versa. Some have a long or short spine relative to limb length. This is going to have an impact on their cat position, and consequently an impact on any pose they move into from there.

Stability and balance

Standing upright on two feet as humans do is quite something! It's an unstable position, particularly in a jointed human body with relatively small feet.

The cat position is a very stable position, in the same way as a four-legged table is more stable than a three-legged table, or any two footed structure. The cat balance poses can be used to practice balancing skills, which some beginners find more accessible than standing balances.

In cat balances we can also help students to stabilise the spine by refining relationships to ground and space by exploring aspects of grounding and reaching.

Crawling and contralateral movement

These movements can all be explored from a cat position. Some examples:

- Crawling (contralateral).
- Lizard walking (sidebend crawling).
- Pigeon crawling.
- Spinal rotation – threading the needle.
- Inversion – rabbit, down dog.

The regions of the spine

Cat stretches give us not only a great way to mobilise the spine, but also give us an opportunity to explore the movements of the different regions of the spine. When we flex or extend the spine, the head and thorax tilt in the same direction, but the pelvis tilts in the opposite direction. In extension

the lordotic neck and lumbar curves deepen and we reverse the kyphotic thoracic curve. In flexion we reverse the lordotic curves and deepen the kyphotic thoracic curve. By deepening our body awareness from gross to more subtle, we can begin to feel which areas are flowing well and which are less functional.

The neck

Having the neck in congruity with the rest of the spine will avoid strain. Human heads and necks are designed to be poised on top of an upright body, unlike cats and other four-legged animals, whose heads are attached at a different angle so that they can easily look forward without straining the neck.

In the static cat position, looking at the floor will bring the neck into a neutral position without any hyperextension or hyperflexion. However the muscles at the back of the neck will be having to contract to hold the head in that position.

In the dynamic cat stretch exercise, we can explore flexion and extension of the neck in a safer way than in an upright stance.

Working with wrist conditions

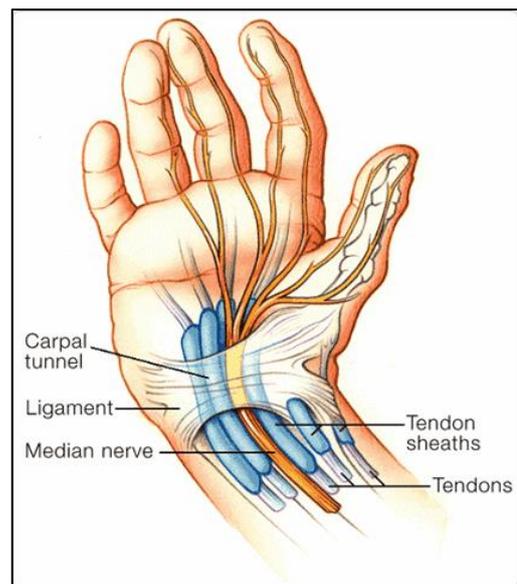
In cat pose there is a strong extension of the hand at the wrist joint. Additionally, the hands are becoming feet and supporting the weight of the upper body. When joints are made to support weight like this they are known as 'bone-loading' or 'weight bearing' exercises. Bone-loading exercises have been shown to build up bone density, and so are very useful for people with osteoporosis. See here: <https://www.nhs.uk/Livewell/healthy-bones/Pages/exercises-for-strong-bones.aspx> and here: <https://nos.org.uk/about-osteoporosis/your-bone-strength/bone-building-exercise/>

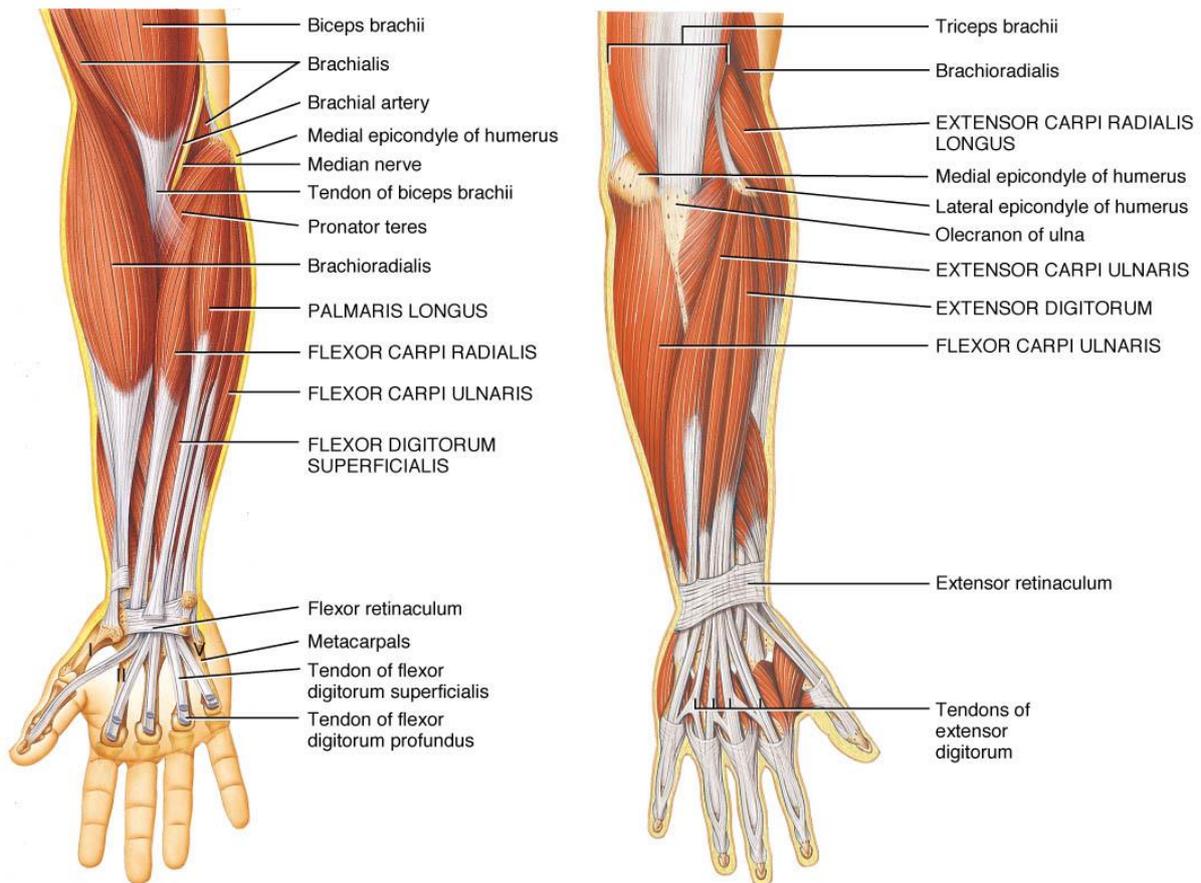
Building up bone density is a slow process and needs regular practice at an appropriate level. For some people with osteoporosis, simply coming into a cat position and doing a few cat stretches is a good beginning and something they can build on.

Even the simple static pose can cause problems for people with wrist injuries, arthritis, repetitive strain injury (RSI) or carpal tunnel syndrome. Although cat poses are helpful in the rehabilitation of all of these conditions, anyone experiencing pain will undoubtedly be tense in their body, so if you are moving from cat into other poses it's worth spending time to find a pain-free start position.

Blankets and blocks can be used in various ways to support the wrists. It's important however to ensure that students don't lose their sense of grounding because of the use of props (we'll explore the implications of these at the workshop).

Another alternative is for students to bring their elbows to the ground and rest on the forearms. Many cat-based poses can work from this starting point. Care needs to be taken that students are well-grounded into the elbows to prevent the shoulders tightening up. It can feel strange to use the elbows for support and may take some careful guidance.





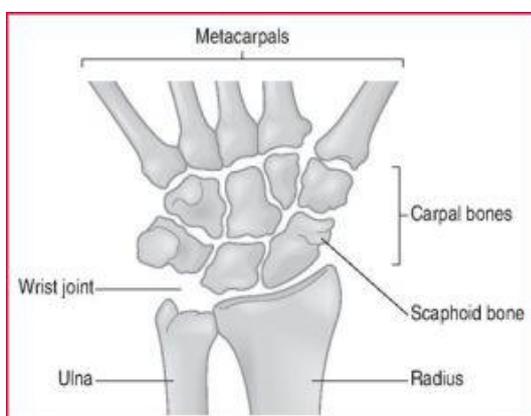
(a) Anterior superficial view

(b) Posterior superficial view

If cat position causes pain in the wrists, another alternative is to take the hands further forward to lessen the degree of extension. Note that this takes the arms away from the line of gravity and so is harder work for the arm and shoulder muscles.

Limbering the wrists

People who are new to yoga or those who have wrist conditions will benefit greatly from carrying out some simple wrist exercises, from a standing or sitting position. There are very many of these, and we will work through a range of them at the workshop. For some basic wrist limbers, see here: http://rashmirastogi.blogspot.co.uk/2008/06/pawanmuktasana-series-anti-rheumatic_30.html



Working the wrists harder

After becoming accustomed to simple cat stretches without pain, and for those without wrist problems, a useful next step can be to work with cat balances, going from a 4-footed animal, to 3 feet, to 2 feet. There is a balance challenge but there is also an increasing weight load on the wrists. Coming into downward dog pose lifts the pelvis high, shifting the centre of gravity forward and loading the wrists even further, and 3-legged dog is one step more. Vasistasana (which you could think of as a 2-legged dog) puts a heavy load on the wrists.

Knees

The knee joints are in a moderate flexion, suitable for most people. However the pressure on the kneecaps from the weight of the lower body when working on a hard floor while the quadriceps and patellar tendon are stretched, can cause pain. If any discomfort is felt, it will likely become worse during a practice in this position, so adequate padding under the knees is wise. The padding shouldn't be too thick though or there will be a loss of grounding, and it's important to have the same thickness under both knees to keep the pelvis level, even if there is only one injured knee.

If this is still problematic, standing with the hands flat on the seat of a chair can be useful.

Elbows

Some questions we will look at in the workshop and to explore in your teaching: Which way should the inner elbows face? What happens if we bend the elbows?

Other health benefits

Ideally, abdominal organs slide around over each other as we breathe and move. Sometimes they get stuck. Cat exercises assist in maintaining mobility and motility of abdominal organs. They also promote the circulation of blood in the capillaries and movement of lymph, and good functioning of peristalsis.

Illustrations from <https://gymnasticsinjuries.wordpress.com/2013/09/14/anatomy-of-the-wrist/>