

yoga perspectives

part 3 the knee

by Mia Forbes Pirie

Exploring the knee through different perspectives and Yoga traditions



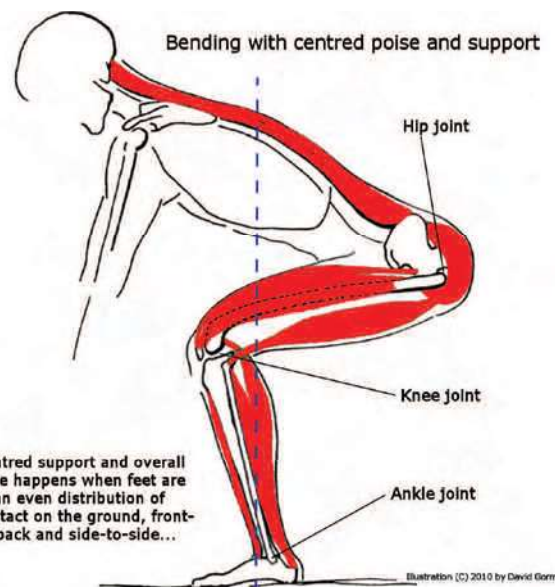
Mia sitting with ancient Buddha statues in Siddhasana

the knee

Everyone wants to be flexible: to be able to sit in full lotus, to put their leg behind their head and perform deep backbends. Naturally flexible people speak of the difficulty in building strength. In moments of envy, it is easy to forget that part of the equation. But Yoga is not practised from the outside and the more we force to achieve a posture, the more injuries come our way to remind us what Yoga is really about.

Injuries to the knee are common in Yoga and are generally linked with straining to achieve something the body is not quite ready for. This can be a painful discovery, on both a physical and emotional level. On a physical level, the knee is delicately balanced and intricately linked to everything above and below it. Once injured, pain can be recurring and knees can take a long time to heal. On an emotional level, it is always difficult to look head on at how our pride and desire can result in us doing harm to ourselves.

common knee problems



Bending correctly is important to avoid putting excess pressure on the knees. Picture by David Gorman.

The most important thing to know about the anatomy of the knee is very simple: that it is located between the feet and the hips. Straining to overcome tight hips is the most common way to injure knees in Yoga. Most knee problems stem from stiffness of the hip: the knee being the smaller, weaker joint takes the flack for the larger stronger joint above it. As Kino MacGregor (*Ashtanga Yoga*) explains, the hip joint is deeper, more stable and harder to move than the knee joint. Most of the teachers I interviewed agreed that injury to the knees generally comes from torque and twisting motions. It is rare for a knee to be injured when the leg is straight. Injuries generally occur when the leg is twisted and the stronger, tighter hips will not rotate. The knee joint suffers as a result.

Other common damage situations for knees are forces from the side, hyperextension and too much pressure being put on the knee in crouching postures. When the knee experiences forces from the side, pushing it inwards or outwards, this can damage the ligaments (generally those on the side of the knee). This can happen, for example, due to fallen arches. Hyperextension occurs when the knees are forced back past their normal range. When the knees are bent while standing and the weight is behind the knees, this can create disproportionate levels of pressure.

how to avoid damage *steady balanced postures*

The 'Yoga Sutras' of Patanjali state that postures should be steady, balanced and comfortable. Many years ago, when Sri K Pattabhi Jois (*Ashtanga Yoga's* founding father) was still alive and teaching, some of his students were extolling the virtues of a highly flexible Yoga teacher. Guruji turned to them and said that it was true that this person was flexible, but 'Tim steady'. He was referring to the incredible Tim Miller who, although not born flexible, is strong and steadfast in his postures and in his practice, reminding these students that flexibility is not the only important thing in Yoga. Strength is also an important factor. Nowhere is the cultivation of the steadiness, balance and comfort described in that Sutra more important than in protecting the knee.

Understanding how central this maxim is to our Yoga practice, Yogamasti has placed the Sanskrit version, 'Sukham Sthiram Asanam', on the outfit that I have chosen to wear in the photographs for this article.

One of the fundamental elements of David Gorman's (*Alexander Technique and Learning Methods*) teachings is to aim for a centred and poised support which minimises the forces on the joints and muscular effort involved. In standing, this means that there would be a relatively even distribution of contact of each foot with the floor. Much lip service is paid to this in Yoga classes, but its importance and how to go about it is often underestimated or misunderstood. Postures grow from the roots. An even distribution creates not only a firm foundation but also a basis for balance and ease of movement throughout the body. Chuck Miller suggests that this may be the best way to start to tap into the energy of *Mulha bandha* (the root lock) without doing violence to the body. Kino MacGregor cautions that people often do not put enough pressure into the big toe.

When awareness is brought to our balance (in sitting or in standing), we begin to learn to trust our bodies, progressing at our own pace and preventing overstraining or overstretching. As Gorman says, you will only be able to use your body well when strain and effort as well as poise and support are experiences, not merely a theory. People need to avoid forcing and the resultant tightness which will make them less flexible and put more pressure on their joints.

Never strain the knee to get into a posture which may be impeded by stiff hips. The only strain (as opposed to a gentle stretch) that should be felt in the knee, says Paul Grilley (*Yin Yoga*), is that felt when trying to kneel, ie the general tension along the front part of the

Top: Headstand: Steady balanced posture

Centre: Kneeling in Child's Pose

Bottom: Healing and protection: Strengthen the quadriceps group of muscles to protect the knee. This was recommended to me by Paratroopers many years ago – and also has Ruth White's seal of approval!





knee whilst gently stretching the joint capsules and tendons.

Much is made of 'achieving' the Lotus posture in Yoga (*Padmasana*) and many injuries are sustained in trying to achieve it. Although the Buddha is sometimes depicted in Lotus, he is more frequently represented in the far more accessible (and less damaging to the knees) *Siddhasana* (Adept pose). When people try to push themselves into a Yoga posture, counsels Chuck Miller, they are identifying with the external shape thereby increasing their weaknesses and relying on mere strength. People need to understand what it means to challenge themselves in a new way, including taking care of themselves. Ruth White explains that our pride often gets in the way.

Perhaps the best way to avoid knee injuries, advises Kino MacGregor, is to exercise patience and await the opening in terms of alignment principles which focus on the hip joint rather than rotation to the knee.

Many practitioners start their Yoga practices with no kinaesthetic feeling of their hip joint. As this begins to develop, practitioners will be able to become aware of the rotation of the hip joint within the hip socket. When this is experienced, the real journey begins. Working in this patient, listening way, will help to prevent many knee injuries. David Gorman advises that people need to be sufficiently aware to know when they are straining.

Developing this inner awareness is more important than trying to achieve the ideal shape. As Aadil Palkhivala says, "Don't perform, explore".

Avoiding hyperextension – 'learning to find zero'

Imagine a line down the side of your leg running from your hip joint to your ankle. If the centre of your knee lies behind that line, it is hyper-extended. When people try to push themselves into a shape, they are not finding balance, explains Chuck Miller. They need to understand and find zero, as well as developing the strength to hold themselves back. It can be hard to find the motivation to do this.

Both Ruth White and Kino MacGregor have, in the past, had to contend with a tendency to hyper-extend. Ruth White explains that it is really a 'collapse' which can lead to a 'baker's cyst' at the back of the knee. This is where fluid collects in the back of the knee forming a small bulge. When the baker's cyst bursts, fluid can flow down to the ankle causing extreme pain and discomfort. When this occurs, there is little which can be done to heal it apart from just waiting. Ruth also explains that when we are sitting or inverted, hyperextension is less damaging (although it should still be avoided) since the weight of the body is not bearing down on the knee. Pressing down into the ground helps to keep the leg muscles activated and protects against hyperextension.

If knee issues are hip related, the best course of action is to find safe ways of opening them. Aadil Palkhivala recommends his hip series which safely opens the hip joint in its full range of movement. To redress knee injuries straight leg lifts can be helpful.

Remember, if you don't go within, you go without. Practise with kindness and put the safety of your knees above any kind of acrobatics or pride.

Tips on how to keep your knees safe.

Healing and protection: Strengthen the quadriceps group of muscles to protect the knee. This was recommended to me by paratroopers many years ago – and also has Ruth White's seal of approval!

More tips on taking care of the knees will be published in next month's Yoga Perspectives series.

Top: Warrior II: Steady balanced safe hip-opening posture – knee aligned with second toe – use standing poses to safely open the hips – make sure the knee is aligned with the second toe.

Circular picture: Make sure the knee is aligned with the second toe.

Centre: Half-lotus or Siddhasana are both stable, balanced sitting postures. Do not push yourself into full or half-lotus to the detriment of your knees. Listen to your body!

Bottom: Odd as it may seem – it can be more comfortable to go into full-lotus upside down! There is less pressure on the knees! Nonetheless – never force into this posture!

