

Anatomical Basis of New Loci

If we accept the existence of these new loci, it is logical to look for the anatomical basis for these findings.

In the traditional model palpation of the sacroiliac joint stops just above the Posterior Superior Iliac Spine (PSIS). When we look at the internal surface of the Ilium, the superior boundary of the articular surface of the joint does seem to extend higher than the PSIS but also certainly lower than the sacral base.

So how is it possible to feel the joint at the sacral base and higher? The answer appears to lie in the ligamentous attachments.

Although the superior border of the osteological articular surface of the joint lies between the PSIS and the sacral base, the thick posterior sacroiliac ligament and the anterior sacroiliac ligament encapsulate the joint extending to the sacral base. This would account for the S1 complex.

The entire upper body weight is supported by the sacrum and passes slightly anterior to the joint. Hence the posterior sacroiliac ligament is incredibly deep, thick and strong. We can see this in cross section denoted by "P". We can also see the extent of this ligamentous attachment in the rough area of the interior aspect of the Iliac Tuberosity.

The Iliolumbar ligament and lumbosacral ligament comprise a fan shaped and variable complex ligament which is sometimes referred to as the lumbo-ilio-sacral ligament. This ligament extends laterally from the transverse processes of L5 and sometimes L4 and reaches the Iliac crest and both the anterior and posterior aspects of the sacroiliac joint capsule.

I think this ligament is responsible for the palpatory point denoted as Lateral S1.

It would appear that the palpatory points S1 and Lateral S1 are transferring tissue tension from the true upper pole of the

sacroiliac joint. In this sense the palpation of the sacroiliac joint radiates out over a greater area than the size of the joint itself.

These ligaments are also instrumental in the direct transference of structural problems in the pelvis into the lumbar spine, particularly L5/S1 and L4/5

It would seem safe to assume that S2/3 relates to part of the lower pole and that S3 is the absolute inferior tip of the joint due to their proximity to the surface. However it is harder to postulate which area relates to S2.

It might seem logical to assign S2 to the centre of the joint but we also need to consider the apparent palpatory gap between Supra S2 and S1. Perhaps this palpatory gap refers to the centre of the joint. Perhaps Bonnaire's tubercle creates a stable central area which prevents lesion formation. In this case S2 might be the upper part of the lower pole.

It is difficult to know for certain which part of the joint buried deep inside the pelvis relates to the palpatory points on the outside particularly with reference to S2. However I think it is fair to say that the S1 complex relates to the true upper pole of the sacroiliac joint and S2/3 and S3 relates to the lower pole.