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The battle of the sexes – in saddle fit!

Qflexion, hip joint articulation, seat twist vs seat width, biomechanics, and the all-important "ps": (pubic symphysis).

If you're in the market for a new saddle, there is some updated thinking on how that saddle will complement your body and affect your riding ability.

Horse Country recently offered some tips for improving dressage riding, and one of the paragraphs discussed an incorrect riding position.

Sabine Schleese from Schleese Saddles (who reads Horse Country regularly) offered some additional advice in an email to editor Linda Hazelwood. She commented that "a rider's position will also be dependent on riding in a gender-correct saddle. I have attached an article concerning exactly this point, because you would be doing your readership a disservice if this one key variable is not pointed out. At the end of the day if your saddle is not supporting your position you will be fighting it to maintain your balanced, correct position instead of using it to help you ride (which is of course, even more important in dressage than in other disciplines!)".

She offered an article for Horse Country readers which is specific to considerations for the female rider and suggested, "Given the demographics of the sport and the ubiquitous availability of 'gender-correct' saddles for men, recommendations on saddle fitting are probably slanted."

Our Dressage Tips article also commented that the horse may "eventually move crooked under saddle" and was perhaps somewhat disingenuous, given that the article was about riding tips, not saddle fitting tips.

Sabine offered this comment:

- a) Since the majority of horses are muscled unevenly (greater musculature usually on the left), and saddles are often fitted for even horses, the stronger left shoulder will cause the saddle to automatically shift right during movement.
- b) Many saddles have too narrow a gullet channel to begin with, which then during this shift of the saddle (usually to the right) will cause pinching of the nerves along the spine, impact the dorsal ligament system, and can cause subluxations in the S-I joint. There is increased pressure on the back right lumbar area, which has been proven with the use of thermographic imaging.
- c) The rider then compensates by leaning to the left in an attempt to straighten out the saddle balance – which will then cause rider back pain as well and definitely be a hindrance in trying to achieve the elusive 'shoulder-hipsheels' straight line.







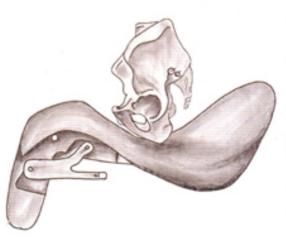
Left: Female in saddle Above: Female pelvis in saddle Right: Cast of female rider in the saddle showing the connection of the pelvic bones



closer examination of the plaster casts of their pelvic regions reveals the differences between man and women. Note particularly the width between the seat bones and the pubic symphysis (ps) of the female cast (above) which hits at the front. The male's ps is higher and not in contact

Although both of these riders are pretty similar in physique,

Left: Male in saddle Below: Male pelvis in saddle Right: Cast of male rider in the saddle showing the connection of the pelvic bones





Saddle Fit and the Female Saddle

Not widely understood or discussed are the challenges faced by many female riders – back, knee, and hip pain, discomfort and pain in the pelvic (crotch) area, and difficulty maintaining proper position and posture (eg. chair seat) when riding.

There is much knowledge on principles of saddle fitting to the horse. However, saddle fit to rider is not widely understood. Manufacturing and the trade of saddlery is historically rooted in European tradition, where primarily male saddlers built saddles for male riders. Today the majority of riders are women (with a different pelvic structure than that of men). If we study the anatomical differences between women and men, we discover that many of the challenges faced by female riders are caused by riding in 'male' saddles.

Over the past 27 years, Master Saddler Jochen Schleese has studied the science of saddle fit, female anatomy and biomechanics, making him an expert in rider and saddle ergonomics. Jochen outlines five key principles to determine saddle fit to women.

The width between a woman's upper inner thighs affects the width of the twist she will need in her saddle. The twist is that part of the saddle where the upper inner thighs sit against. Because of a phenomenon called "Qflexion" (whereby female thighs tend to angle outwards at the hip and back inwards at the knee), women will carry more weight on their upper inner thigh than a man. The leg is pushed forward, and the knee and toes are out at 45° angle when a woman sits on a saddle that is too wide between her upper inner thighs. The position results in a leg that goes out and forward, making it difficult to achieve the 'shoulder-hips-heels' straight line. When a woman rides in a female saddle, the toes point forward and there is more upper leg on the barrel of the horse.

Stirrup bar

The ratio of the length of the upper leg to the length of the lower leg determines the position and/or length of the stirrup bar. Most women have a longer upper leg than a lower leg. The stirrup bar acts like the fulcrum and the stirrup leather is like a pendulum. With a regular stirrup bar positioned normally, the female's leg will usually end up being too far forward. "Get your leg back!" Does this sound familiar? This is because the leg will fall according to its centre of gravity. Therefore, women required extended stirrup bars (or extra-extended). Allowing the stirrup leathers to be positioned further back will ensure that the leg hangs in the correct position. Most men have pretty equal leg lengths so that normal stirrup bar length and position is fine.

Hip bones

Women's hip bones are articulated at the hip joint differently than men's. Especially female adult amateur riders, who started riding later in life or who don't ride regularly, are challenged to have their legs hang straight, because this articulation causes the legs to naturally angle out. Men's legs hang straight naturally, but changing the angle of the flap and the position of the thigh roll will address this for women in a female saddle. If the flap is too straight, the woman's knee comes too close to the front of the flap, and in motion the leg will actually go over the flap. Forcing this ("get your leg back!" – again!) can move the pelvis forward, resulting in back pain and discomfort. Proper flap positioning is another small point in accommodating the female anatomy in saddle design.

Twist vs width

Most mistakes occur during measurement of the width of the twist and the width of the seat. The twist is that area of the saddle which is actually located between the thighs, whereas the width of the seat is determined by the space between the seam running along the edge of the seat. In the male pelvis, the seat bones are much closer together and the distance between the two seat bones is much smaller, therefore the male comfortably fits into the padded part of most saddles.

Pelvic bones

The female pelvis has the seat bones much further apart, so when she rides in a 'male' saddle, she sits on the seat seaming, which is uncomfortable. Often the seat twist and seat width are mixed up, and she will end up buying a saddle with a wide twist rather than the wide seat she actually needs for her pelvic shape. As a result, her knees and hips will angle out instead of being able to hang straight down, causing discomfort (when the twist is too wide, and the seat is too narrow). The distance between the seams on the seat should be wide enough to allow the female seat bones to sit on the padding. If this is too narrow,

it feels like sitting on a ridge, or the seat bones fall off the edge of the seat.

The ps

The male pelvis has a higher pubic symphysis (ps). When he sits in a balanced position with his spine perpendicular to the ground, his ps will be tipped upwards and not contact the saddle. When the female sits on the saddle with her spine perpendicular to the ground, her ps is much lower and closer to front of saddle and can contact and rub. This can result in recurring bladder infections, even bleeding. Pelvic tilt is also affected by the saddle model and the saddle balance.

When a male rider sits on a male saddle, he can balance on his seat bones as on a bipod, whereas the female finds her balance on a male saddle in a tripod position, which means her ps will be in contact with the front of a saddle.

Schleese's patented AdapTree ® has a cut out in the front of saddle tree to form a channel for space between the ps and saddle. This channel is filled with foam and is very forgiving to the position of the rider in balance – for both men and women!