RIDER'S SPRAIN.

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From the comparatively little attention that this accident has received, one would be led to suppose that it is of a trivial nature, or not sufficiently important to merit serious consideration from a surgical point of view; but any one who has experienced this injury will bear me out when I say that, from its often tedious recovery, and the disability which it occasions, rider's sprain deserves the most careful study, both as to its causation and treatment, more especially as affecting the mounted branches of the Service.

It is now beyond doubt that the muscle engaged is not what is sometimes erroneously called the "tailor's muscle," but the adductor longus, which may be affected to any extent, varying from a slight sprain to more or less complete rupture of the muscle and its sheath or tendon. In severe cases the point usually torn is at its insertion into the rami of the pubes. Again, I have known the sheath of the muscle to be completely severed in addition to its tendon, and the belly of the muscle forming a large tumour in the upper or inner third of the thigh; more often than not it is in the right thigh that the muscle gives way, and when there is much laceration one often finds very extensive ecchymosis extending in all directions from the part immediately implicated.

In this connection it will be observed that the situation and extent of this injury occupies a position in no way connected with the sartorius muscle. The latter may, of course, in common with any other muscle, meet with accident, but it is not involved in the particular injury which now claims attention.

Coming to the cause, this is usually owing to the extra effort occasioned in keeping one's seat, either in taking a fence, when the horse happens "to peck" badly, or, as in my own case, when in jumping a high wall, the horse unexpectedly attempts to "change," thereby causing the rider a sudden jar, the extra strain being sufficient to cause the muscle to give way.

In my opinion, it is highly important to recognise the possibility of this occurrence, even when few, if any, external signs are manifest, inasmuch as a slight sprain of this particular muscle will render the victim utterly incapable of taking a "grip" of the saddle, which has no doubt often led to a perhaps promising
recruit being stamped as a "scrimshanker" or duffer, simply because he is sure to fall off in the most helpless manner every time he mounts a horse; nay, more, I have heard of young cavalry officers being obliged to retire, solely, I believe, because the nature of their disability has formerly been imperfectly understood.

The treatment must be seriously taken in hand from the first, for, if neglected, the tendency of this accident is to become more aggravated. In this connection I advocate a somewhat similar procedure to that of a fractured bone, as, without proper support, how can the muscle properly unite if not kept in its place and sheath? I have therefore devised an appliance for this purpose, formed of the stoutest elastic band made, which should be 5 inches in width, stiffened by a couple of slips of whalebone let in at intervals, and cut so as to envelop in its circumference the upper portion of thigh, taking care that the opposite ends do not approximate by more than 1 inch, so as to admit of the required stretch to get a good grip when fastened by means of three straps and double or "whole" buckles on outer aspect of thigh. Further, it is essential that the upper edge of band be brought right up to the "fork." A suitable pad should be inserted inside the elastic band over seat of injury, and finally a soft leather strap, similar to a bridle rein, should be attached to a stud or buckle on upper and outer edge of appliance, then brought round the body and crossed so as to form a figure of eight over hip of side affected, and also fastened to a separate buckle attached to elastic band. By this means the great drawback of most appliances, i.e., the tendency to slip down, is effectually prevented. With this appliance on, the patient is made quite comfortable, and could almost at once commence riding; but here I would recommend that sufficient time elapse for the repair, necessitated by the amount of injury sustained, to become healed, which ordinarily, in severe cases, would be two or three weeks at least, although I have known cases occurring in Masters of Hounds, when wearing the appliance here described, commence hunting much earlier, and amongst others, the present Master of the Blackmore Vale, one of the hardest riding men in England.

So far, the treatment has been directed to the actual repair and support of the affected muscle. That having healed, the next point required is to strengthen and bring back the lost power to the adductor longus, and it is at this stage that gymnastics, in the form of the cord and pulley apparatus, come into use. The latter can readily be rigged up in any room or corridor which
admits of a pulley, through which the cord pays, being screwed into a beam or other woodwork in the ceiling. The cord, which should be similar to that used in window sashes, must be sufficiently long to reach from ground to ceiling, and about 3 feet short of the floor again; to this latter, or short end, is attached a 7 or 10-lb. shot to commence with, whilst at the other, or longer end, is a strap and buckle fixed to cord, which fastens in figure of eight fashion over ankle of affected limb. The correct motion of the adductors can then be brought into play by raising and lowering the weight at other end, and by this means, and this alone, can the affected muscle be exercised, gradually at first, from ten to fifteen minutes at a time, once or twice daily, until greater liberties can be taken; when ultimately, in the course of a few weeks, this muscle should regain to a great extent its former tone, and even become stronger than its fellow, in which event, the sound leg should be also exercised, so as to bring both sides even; otherwise, the weakest is likely to give way on any further extra strain. I recommend, however, that for some time afterwards, when riding, the appliance be worn as a precautionary measure.