

the mucosa and wall of the vagina, or they may be entirely submucous. Each of the varieties may vary greatly in degree. This is a practical division of all lacerations, and such elaborate classifications as are found in some text-books—as, for instance, in Byford's twenty-three distinct varieties of laceration are described—are confusing and without importance. Lacerations of the second class are usually of little importance, except from a cosmetic or perhaps hygienic point of view, and they will not be further separately considered here. Our remarks will be limited to old lacerations of the muscular plane.

Schatz* was one of the first to call attention to lacerations of these muscles and the ill effects which followed the loss of muscular support. Since then many others have written about lacerations of these muscles with their fasciæ, but most of their statements have been founded on opinion unsupported by anatomic demonstration, hence are not always strictly in accord with the facts. As the caudal end of the spine in the human subject is much less movable than in the lower animals, we find the muscles which were active in moving this appendage in animals gradually becoming more fibrous or fascial in character in man as we approach the spine. As the extent of motion of the pelvic outlet or degree of laceration produced by the passage of the child at birth increases markedly as we proceed ventrally, we would expect to find lacerations more common and of greater degree in this portion of the pelvic floor; and such is true.

The puborectalis and ventral portion of the pubococcygeus are the muscles which must undergo the greatest elongation. In all cases of relaxation of the pelvic floor in which I have resected these muscles I have found lacerations of greater or less degree. Lacerations may take place in any portion of the length of the muscles, but are more common in that portion of the muscle which passes across the lateral wall of the vagina. It may be that the parietal bosses or the blades of the forceps are instrumental in determining, to some extent, the location of the laceration. The location of the laceration in the muscle does not necessarily correspond to the location of the tear in vaginal wall, and the muscle may be extensively torn without the vaginal wall giving way at all. In fact, many, if not a large majority, of the muscle lacerations are entirely subvaginal.

The lacerations may be multiple or single. Numerous slight lacerations may take place, as shown in the specimens under the microscope. Here the separation from any individual tear is slight, but taken altogether produces considerable lengthening of the muscle. We may have a single, complete, transverse tear of the muscle, with wide separation of the ends.

* *Archives f. Gyn.*, 22.