

the epigastric plexus, which sends branches along the arteries to the different organs, and so when any viscus is inflamed the irritation is conveyed up these branches to the epigastric plexus, and from this plexus to the splanchnics, thence through the branches joining the splanchnics to the intercostals which supply the abdominal muscles. Possibly pain in the shoulder, that is said to be oftentimes caused by hepatic trouble, may be a reflection through the sympathetic which supplies the liver and communicates in the neck with the cervical plexus or spinal accessory which supplies the shoulder, and being a sensory as well as a motor nerve to the trapezius, may account for the aching felt here in this condition. In the perineal region, however, we are daily brought in contact with these indirect reflex effects, such as vesical tenesmus from piles, fissure ani, &c., and conversely, pain and tenesmus of the rectum from cystitis, stone in the bladder, inflammation of prostate, &c.

The connection here is by means of the 4th sacral nerve. The sides of the prostate and neck of the bladder are supplied by the sympathetic, *i.e.*, inferior hypogastric plexus, and this plexus also receives a branch from the 4th sacral, but the 4th sacral sends branches to the levator ani and sphincter ani, hence the intimate relation between the bladder, prostate and anus. This connection was recently emphasized in a very severe case of prolapsus ani in a child, in which every form of treatment by astringents failed, but which was readily relieved by circumcision. Here retained secretion behind the glans constantly irritated the cavernous nerve, a projection forward of the plexus spoken of above, and the constant irritation weakened the sphincter muscle, allowing the prolapse.

The path in this example being from the cavernous up to the inferior hypogastric plexus, and through the branch of the 4th sacral in connection with that plexus to the other branches of the 4th supplying the levator ani.

Stone in the bladder is frequently accompanied by pain behind the glans penis, due to the connection of the cavernous nerve above referred to with the sympathetic plexus alongside of the neck of the bladder. Irritation of the urethral mucous membrane causes erection of penis and spasmodic stricture, because the mucous membrane is supplied by the int. pudic nerve, which is also distributed to the erector penis and compressor urethral.

Again, the aching pain of the testicle from irritation derived from the kidneys, as in acute nephritis or renal calculus, is due to the fact that the testicle has connected with it the spermatic plexus, a projection of the renal sympathetic system. And this relation also explains the severe shock and vomiting resulting from injury to the testicle because the spermatic is in-