

4. *Transversalis abdominis.*

- Le muscle transverse*, Vicq d'Azyr, 1774, p. 490, No. 3.
Der Querbauchmuskel, Merrem.
Der Querbauchmuskel, Wiedemann, p. 80.
Der quere Bauchmuskel, Tiedemann, p. 297, No. 3.
Muscle transverse de l'abdomen, Meckel, vol. vi. p. 19, No. 3.
Transversalis abdominis, Owen, p. 31.
Transversus abdominis, Selenka, vol. vi. p. 105, No. 30.
Le transverse, Gervais and Alix, p. 17.

Attachments.—The transversalis abdominis arises from the whole length of the pubic bone posterior to the origin of the internal oblique. The greater number of the fibres pass transversely, but the anterior fibres pass downwards and forwards, while the posterior fibres pass downwards and backwards. The fibres are inserted into the whole length of the vertebral segment of the last rib, as well as into the abdominal aponeurosis, the latter insertion extending from the sternum in front to within an inch and a half of the anus behind.

Action.—The muscles of opposite sides contracting simultaneously diminish the capacity of the abdominal cavity.

Relations.—The muscle is concealed superficially by the obliquus externus and rectus abdominis.

Nerve supply.—Indirect branches of the lumbar plexus.

Variations.—In one specimen of *Aptenodytes* the costal insertion of this muscle was absent, although in other specimens of the same species it was present. In *Spheniscus mendiculus* also the costal insertion was wanting, the muscle being inserted exclusively into the abdominal aponeurosis. In *Spheniscus minor*, although the specimen which I dissected was in excellent preservation, I failed to recognise the presence of the transversalis abdominis.

5. *Rectus abdominis.*

- Gerader Bauchmuskel*, Merrom.
Gerader Bauchmuskel, Wiedemann, p. 80.
Der gerade Bauchmuskel, Tiedemann, p. 297, No. 4.
Le muscle droit de l'abdomen, Meckel, vol. vi. p. 20, No. 4.
Droit du bas-ventre, Cuvier, vol. i. p. 217.
Rectus abdominis, Owen, p. 30.
Rectus abdominis, Selenka, vol. vi. p. 103, No. 27.
Grand droit de l'abdomen, Gervais and Alix, p. 17.

Attachments.—The rectus abdominis consists, as pointed out by Gervais and Alix, of two distinct muscular slips.

The internal slip arises from the abdominal aponeurosis, midway between the sternum