

above downwards, the apex of the wedge being anterior. The wedge was continuous by its base with the pedicle of its own side, and was marked laterally by the articular facet for the head of the 10th rib. The bodies of the 9th and 11th dorsals had a greater vertical diameter in front than is usual, so as partially to occupy the cleft between the separated parts of the body of the 10th, but the rest of the interval had doubtless been occupied in the recent spine by intervertebral disc. Owing to this defect in the body of the 10th dorsal vertebra it is probable that a slight posterior or angular curvature had been present during life in the lower dorsal region.

There can of course be no doubt that in the 10th dorsal vertebra of this skeleton each of the two parts of its body had developed from a distinct lateral ossific nucleus instead of from a mesial nucleus, according to the normal arrangement; and the lateral centres must have been separated by a considerable interval in the foetal spine, so as to allow of the relatively wide gap between the two wedge-shaped parts of the bone. It is possible that in the foetal cartilaginous spine the cartilage also may have been divided into two lateral parts not united mesially. This remarkable anomaly in the ossification of a vertebra is very rare, but the case is not unique. Rokitansky has described¹ the 12th dorsal vertebra in a woman, age 55, as divided into two triangular rudiments, inserted laterally between the 11th dorsal and 1st lumbar vertebra, with their points directed inwards, and in consequence of the mesial defect in the body of this vertebra the column was bent backward at a very obtuse angle. Humphry saw in a specimen of spina bifida in the Berlin Museum² several of the vertebral bodies consisting of two halves with an opening between the two. Ahlfeld also refers³ to a case observed by Ammon, in which the bodies of the 12th dorsal and 1st and 2nd lumbar consisted of two lateral halves. An approximation to this condition existed also in the vertebral columns described by Sandifort,⁴ Otto,⁵ and Rokitansky,⁶ in which only one lateral half of a particular vertebra was developed; in both Sandifort's and Otto's cases the half of the vertebral body which was present is described as wedge-shaped.

The lumbar vertebræ had, as a rule, well-marked mammillary processes, but those on the 5th lumbar were not, for the most part, so large as on the four others. Accessory processes were usually present, but their relative size varied in the different skeletons. In the Malay, a Hindoo, and a Lapp, they were strongest in the 1st lumbar; in an Australian, Hindoo, Oahuan, and two Andaman Islanders, they were best marked in the 3rd lumbar, in a Negro in the 4th lumbar. In some of the skeletons the four upper lumbar, in others only the three upper had them distinctly marked. The size of both the mammillary and accessory processes is, without doubt, correlated with the development of those deep muscles of the back which are attached to them.

¹ Pathological Anatomy, *Syd. Soc. Trans.*, vol. iii. p. 232.

² Human Skeleton, p. 124.

³ Die Missbildungen des Menschen, p. 296, 1882.

⁴ Museum anatomicum, vol. iv. p. 74, Tab. clxxviii. fig. 2.

⁵ Seltene Beobachtungen, zweite Sammlung, § 15.

⁶ *Op. cit.*, p. 231.