

## Anatomical Note on a Case of Fused Kidneys

by

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(With Plates 1—2).

At the Service of Pathological Anatomy run by the Instituto OSWALDO CRUZ at the Santa Casa da Misericordia and while carrying out the autopsy of the subject A. V. P., aged 54, spaniard, deceased in the Clinical Service of Dr. SYLVIO MONIZ, one of us was able to observe an anomaly sufficiently rare to deserve being reported here.

The subject had died of cachexia and as a result of carcinoma of the left parotid gland, with metastases in stomach and liver.

Besides this he had intense syphilitic aortitis with some points of calcifying endaortitis of the crossa and voluminous exostoses of the bodies of the vertebræ, especially of the 2nd and 3rd dorsal and 1st and 2nd lumbar.

Upon examining urinary apparatus, we noted the absence of a kidney on the right side. On the other side the corresponding kidney was found to be very elongated, with a downward and lateral-

ward direction and filling not only its normal situation but traversing the superior circumference of the pelvis and the uppermost part of the inferior circumference. This anatomical piece measured 24 cm. of length, 7 cm. of width at upper part and 6 cm. below.

The piece was found upon examination to be made up of two portions, superior and inferior, united by a peduncle 3 centimetres wide.

The anterior surface of the upper portion displayed a depression similar to that found on the concave border of the normal kidney. It represented therefore the renal sinus since in it we found the renal artery to penetrate after dividing in three branches, and the three branches of the renal vein and a long renal pelvis of ramified type to emerge. The latter was followed by an ureter.

On the posterior surface we found on the part belonging to the lower portion a similar though less marked de-



pression. This depression, representing a second renal sinus, harboured a pelvis, with three branches of origin, and giving rise to a second ureter. Corresponding to this second renal sinus was the penetration of an artery dividing in two branches.

The lateral border, slightly convex, showed a well-marked groove, separating the piece in two portions, superior and inferior, joined by a peduncle. The medial border, slightly concave, displayed a groove towards the middle and at this point an artery dividing in 4 branches one of which penetrated the piece in the upper portion, another in its lower portion and the remainder distributing themselves on the peduncle.

At the upper end of the anatomical piece was located the left adrenal while the right was in its normal situation:

Upon making a section through the superior portion from the lateral to the medial border we observed that there were two pelves each one in its own renal sinus. The upper pelvis proceeded from the sinus of the upper third of posterior surface of the upper portion of the piece and was formed by two branches made up by the convergence of the calyces of the pyramids belonging to the upper and the middle thirds of the piece: The second pelvis was situated at the level of the second renal sinus which was located on the lateral border of the piece at the junction, of upper and lower thirds. This second renal pelvis, which was sessile, received three branches formed by the calyces of the pyramids of the lower third of the piece.



**Explanation of Plates.**

**Plate I.**

- Fig. 1.—Anterior Surface.
- Fig. 2.—Posterior Surface.
- Fig. 3.—Lateral Border:

Fig. 4.—Medial Border.

**Plate II.**

- Fig. 1.—Upper Portion. Section from lateral to medial border.
- Fig 2.—Lower Portion. Section from medial to lateral border.

