

The pancake kidney

Ho Yuen Frank Wong ¹ and Kam Ho Lee ¹

¹Department of Radiology, Queen Mary Hospital, 102 Pokfulam Road, Hong Kong, Hong Kong

The pancake kidney, also known as a cake, doughnut, disc, shield, or lump kidney, describes the least common congenital renal fusion anomaly, where the kidneys are completely fused as a lobulated mass in the pelvis (Fig. 1A, B), resembling a pancake (Fig. 2) [1, 2]. The fused kidneys retain separate collecting systems, draining into short ureters that insert normally into the urinary bladder. First described by Looney and Dodd [3], the pancake kidney is considerably rarer than its partially fused cousin the horseshoe kidney, with an estimated incidence of 1 in 65,000–375,000 [2]. It has been postu-

lated that this anomaly arises during development when the umbilical arteries press the nephrogenic primordia together, causing them to fuse and fail to ascend from the pelvis [4]. Vascular supply can be anomalous in both number and origin, arising from the distal aorta or iliac arteries [2]. The collecting systems are also abnormally rotated to face anteriorly [4], and are associated with various duplex configurations [2]. Often an incidental finding, asymptomatic patients can be managed conservatively with monitoring of renal function [1, 4]. Surgery can be considered if complications such as urinary tract infection, stone formation, or obstruction occur [5].

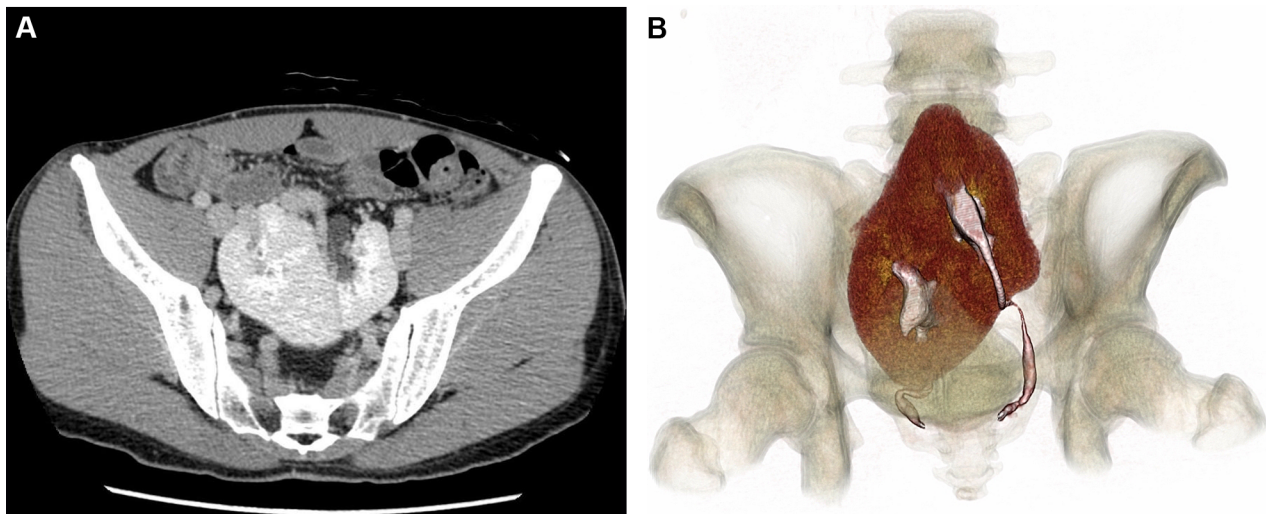


Fig. 1. Axial contrast-enhanced CT (**A**) and volume rendering (**B**) images showing the pancake kidney in the pelvis. Mild hydronephrosis is seen at the left moiety. In this

example, there are two renal arteries supplying the left moiety, and one supplying the right, all arising from the lower abdominal aorta.



Fig. 2. The breakfast food namesake of the pancake kidney. Available at: <https://pixabay.com/en/breakfast-pancake-golden-1278963>.

Compliance with ethical standards

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Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Statement of informed consent was not applicable since the manuscript does not contain any patient data.

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