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Kidney disease is often masked by disorders of other organs and systems, whilst extrarenal disease in turn can lead to kidney injury. Diagnosis is very difficult. Nephrology is an area of medicine, that will only submit to a very attentive and hardworking researcher.

Nephrology is a relatively new study in medicine – it became a separate clinical specialty only in the early second half of the XX century. At the same time, it is one of the areas in the study of internal diseases that is experiencing the most dynamic development. Richard Bright is rightly considered it's "founding father". Without undermining his achievement, it has to be mentioned that back in V-IV century BC Hippocrates noticed that some symptoms seemed to be linked to kidney disease, having concluded: «Bubbles appearing on the surface of the urine indicate diseases of the kidneys and a prolonged illness». In the 1st century BC a disciple of Hippocrates – Rufus of Ephesus published a treatise on Diseases of the Bladder and Kidneys, where

he writes that kidney sclerosis may occur painlessly, but causes oedema. In I-II centuries, Avicenna also associated kidney sclerosis with chronic disease.

In his work (1527), Paracelsus mentions that in some patients adding wine or vinegar to their urine may produce a milky precipitate. Frederick Dekkers from Leiden (in the year 1694) also found that samples of urine, when heated produce a precipitate. Although Dekkers described patients with hydrosarca, he did not associate this condition with the changes in urine. Conversely, nearly seventy years later (1765) Domenico Cotugno described a 28-year-old patient with fever and hydrosarca, whose urine and transudate also produced a precipitate on heating. Around the same time, Rosen von Rosenstein described the course of scarlet fever "with oedema and haematuria".

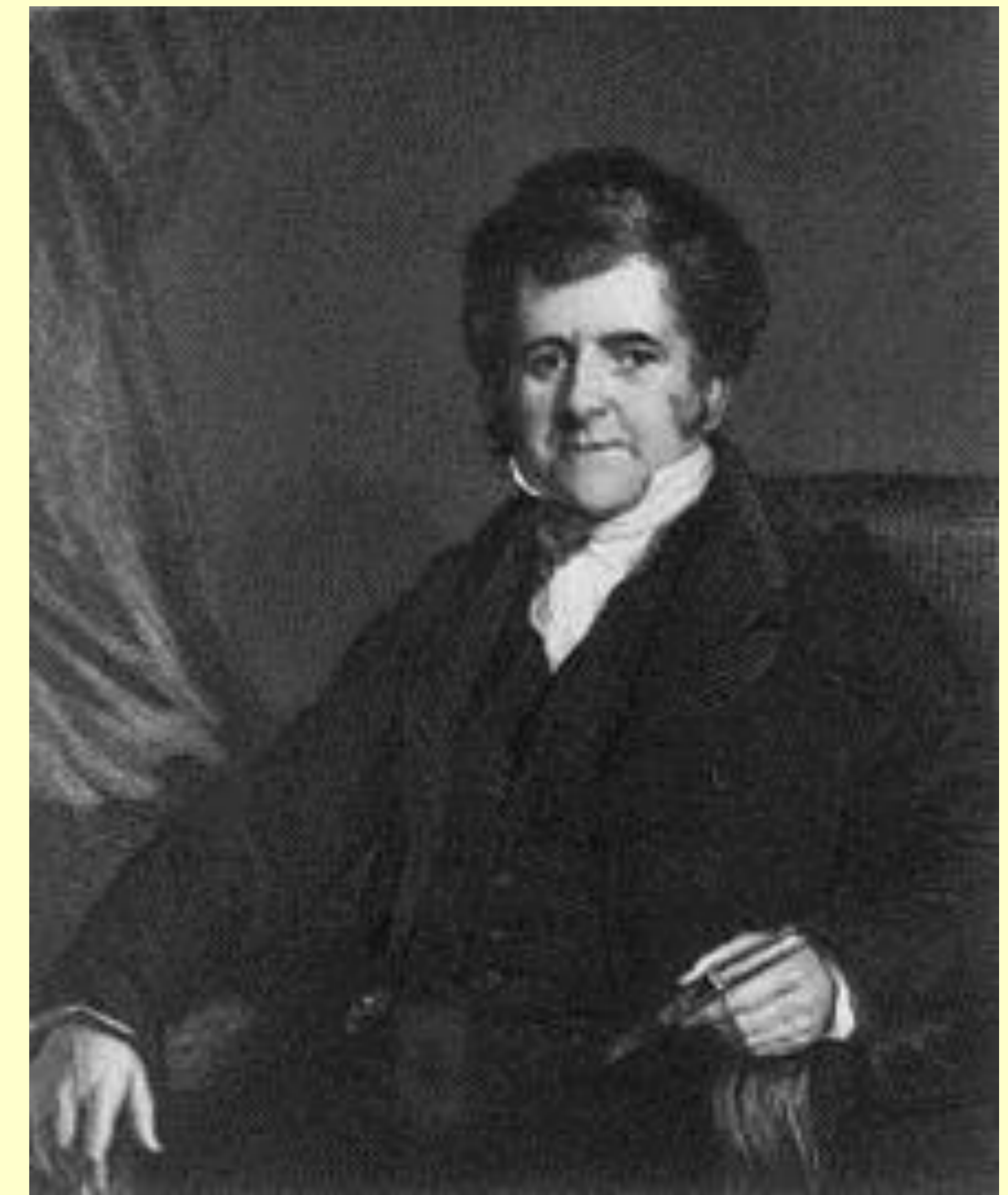
These are only a few examples. But these show that Richard Bright has not founded nephrology out of nowhere. By that time, here was already some knowledge about kidney diseases, but this was not systematic.

The most valued contribution of Richard Bright to nephrology is his systematic comparison and collation of the clinical signs and presentation with the histological changes in the renal tissues of deceased patients. This allowed him to differentiate between different forms of pathology of the renal parenchyma. Richard Bright described acute nephritis, nephrosis (=nephrotic syndrome), uraemia, small contracted and large swollen kidneys, and also noted the link between kidney disease and an enlarged left ventricle as an indirect sign of hypertension (the first sphygmograph was not invented until 1854 y Karl von Vierordt, and the first blood pressure monitor – a sphygmanometer was invented by Scipione Riva-Rocci in 1896). In his important work " Reports in medical cases, selected with a view of illustrating the symptoms and cure of diseases by a reference to morbid anatomy", published in 1827, not only did Bright describe the clinical picture of kidney disease, the clinical and anatomic features, but also the changes in lab indicators by identifying the protein in blood and urine. Richard Bright described in detail the condition which is currently known as "nephrotic syndrome" (or nephrosis), but for nearly one hundred years was known as "Bright's disease".

The results of histological studies in deceased patients with oedema and albuminuria were heterogenous, thus the scientist concluded that similar clinical symptoms may be caused by different diseases. Some of the kidney specimens, made by R. Bright, have been preserved and are kept at Guy's hospital in London. One of these presents the typical mesangiocapillary glomerulonephritis, another – amyloid disease in a patient, suffering from tuberculosis lung disease. It is interesting that Bright's colleagues included the great doctors and scientists – Thomas Hodgkin and Thomas Addison.

Currently, nephrology is not limited to only the classical Bright's disease, but also comprises both an impressive spectrum of true renal diseases and systemic processes of extrarenal disease, which involves kidney injury.

Richard Bright died on 16th December 1858 at the age of 69 years from heart disease and was buried in Kensal Green. He remains in history as the person who quickly, once and for all changed medicine of his time, leaving behind him a great heritage.



Richard Bright. 1789-1858