

or even spermatozoa and where, owing to imperfect examination, the presence of these formed elements is not recognized and the detection of the albumin is thus erroneously attributed to other causes.

Functional albuminuria may be defined as albuminuria in the apparently healthy, but it must be distinctly remembered that all cases of albuminuria in the apparently healthy are not necessarily of functional origin, as some of the graver forms of renal disease may exist for a considerable time without producing marked deterioration in health. The great majority of cases of functional albuminuria are seen, as is well known, in adolescence and especially in boys and young men, but in some of these cases the condition persists on into adult life. There is one form of functional albuminuria at any rate that is readily recognized and in which there need be no hesitation as to the significance to be attached to the condition and that is the form seen in athletes after severe exercise. There is now abundant evidence that albuminuria, often considerable in amount, is a very usual phenomenon after any severe physical exercise and even in individuals of robust frame and vigorous physical development. It is especially seen after rowing and after running races. It is by no means confined to the cases where there is great physical prostration, but may be seen in a very large proportion of individuals taking part in these contests even where there is no appreciable physical distress at the end of the race. In one of the recent inter-university boat races a large proportion of the crews of both boats had albuminuria temporarily after each day's training.

The variety of functional albuminuria seen as the result of exercise is different to other varieties of the affection in the fact that it is directly associated with the exercise and is seen for only a few hours after the cessation of the strain, such patients are not albuminuric in the intervals between the periods of exercise. The mechanism of its production is obscure and has been looked upon by some as merely the result of a disturbed circulation and especially as the result of the production of venous congestion of the kidneys as a sequel to the distention and dilatation of the right side of the