

Frederick Akbar Mahomed: a 19th century pioneer in hypertension

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Most physicians have a knowledge of some of the pioneers in the discovery and description of hypertension such as amongst Britons, Bright Gull and Allbutt, but a number of key contributors to this story languish in relative or complete obscurity. Thus only in the past two decades or so has the central contribution of the Anglo-Indian Akbar Mahomed (1849-1884), physician to Guy's Hospital, been recognized.

Grandson of an Indian soldier and entrepreneur, whilst still a brilliant student at Guy's Mahomed became fascinated by the pulse tracings obtained in health and disease using the sphygmograph, an apparatus which could be attached to the wrist or elsewhere, and take a tracing of the pulse wave. Mahomed modified this apparatus so that the pressure which would occlude the pulse could be measured also, and took recordings of both in patients with many diseases, including renal disorders. Until then, although the "hard pulse" was well known, the concept of intra-arterial pressure was poorly understood, but it and the associated pathology in blood vessels was presumed always to follow overt disease of the kidney, as described by Bright. Mahomed, now qualified, realised that individuals could have pulse tracings suggestive of high arterial tension without any urinary abnormalities, and moreover that some of these individuals were apparently healthy. Thus the concept of "*previsionary diagnosis of obscure [i.e. hidden] diseases*" was born. He noted further that the proportion of such individuals with tracings suggestive of high arterial tension increased steadily with age, and finally described how renal and vascular damage could enter a vicious circle of mutual enhancement. Had not Mahomed died tragically early of typhoid, more of his many original insights into medicine could have been realised.

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