Vascular Lesions Produced by Renal Cortical Extracts of Spontaneously Hypertensive Rats (SHR)

Issei Nishimori, Naotaka Miyagawa, Junichi Miyazaki, and Toshihiro Takagi

From the renal cortical extracts of spontaneously hypertensive rats (SHR) and normal wistar rats, the fraction without pressor effect but with vascular necrotizing effect (F3) and the fraction with pressor effect (F4) were isolated and compared. The pressor effect of F4 showed no difference between SHR and normal rats. Vascular lesions of the mesentery and pancreas produced by renal extracts were examined light microscopically and electron microscopically to compare the vascular necrotizing effects of renal extracts. Both F3 and F4 of SHR showed more intensive vascular necrotizing effect than renal extracts of normal rats. It was speculated that F4 of SHR contains some vascular necrotizing substance without pressor effect.

From the Department of Pathology, Atomic Disease Institute, Nagasaki University School of Medicine, Nagasaki.