47) Study about scalar and vector electrocardiogram of the Spontaneously Hypertensive Rats. Michimasa Kono, Shinobu Sonoda and Yukou Tominaga, Department of Internal Medicine, Sasebo Chuo Hospital, Nagasaki prefecture 585-11. Toshihiro Fujioka, Department of Cardiovascular Disease, Yatsushiro Sogo Hospital, Kumamoto prefecture 866. Goro Mimura, Department of Internal Medicine, College of Health Sciences, University of the Ryukyus, Okinawa prefecture 902.

We recorded scalar electrocardiogram (ECG) and vector electrocardiogram (VCG) of the Spontaneously Hypertensive Rats (SHR) and the Wister Kyoto Rats (W.K.).

Materials and methods.

Thirty SHR and thirty W.K. were used. The period of the observation was from 8 weeks to 48 weeks.

Every 8 weeks, the ECG and VCG were recorded under ethel anesthesia. The posture of the examination of the ECG and VCG were in the supine. VCG were recorded in the Frank lead system.

Results.

In the ECG, Electrical axis of the SHR deviated lefter than the w.k. QRS intervals and QT intervals of the SHR were longer than ones of the W.K.

In the VCG, maximal spatial vector of the SHR were longer than the ones of the W.K., and deviated left back ward.