relatively weak ones (1 hour each) from a General Electric S.1 lamp were given it was observed that the short intense irradiation did not affect the preparation deleteriously and thus the responses to the weak, long irradiations exhibited the same effect as was noted to be the case when short, intense irradiations were employed.

2. Several hearts were immersed in cool (12-14°C.) Ringer's solution until they ceased beating. These were then irradiated and they started to beat after from one to 10 minutes of irradiation. On one heart this irradiation procedure was carried on for a period of 70 hours.

3. Records were obtained of hearts which exhibited an abnormal rhythm and it was noted that short dosages of ultraviolet were quite effective in inducing a normal rhythm and this did not revert to the original state after the cessation of radiation. Also, a slight increase in tonus appeared.

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Normal Heart Weight/Body Weight (HW/BW) and Left to Right Ventricular (L/R) Ratios for Rabbits.*

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In order to have adequate controls for further experimental studies upon cardiac hypertrophy we have considered it necessary to accumulate data from a large series of normal rabbits and to treat this data by statistical methods. Many previous investigators have published average heart weight body weight ratios for small series of rabbits, but there are no figures for the ratio of the left to the right ventricular weights. Hasenfeld and Romberg[1] in a control series of 32 normal rabbits found an average of 2.38 gm. of heart muscle per kilo of body weight. Joseph[2] in a series of 38 male and 66 female rabbits found an average ratio of 2.67 in the males with a maximum of 3.42 and a minimum of 2.07, while for the females the average ratio was 2.70 with a maximum of 4.47 and a minimum

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1 Hasenfeld, A., and Romberg, E., *Arch. f. exp. Path. u. Pharm.*, 1897, **39**, 333.

2 Joseph, D. R., *J. Exp. Med.*, 1908, **10**, 521.

of 2.0 gm. of heart per kilo body weight. Wassermeyer and Rohrbach[3] quote Kuelb's average figure on a small series of normal domestic rabbits at 2.70 and Hesse's average figure of 2.70 on a similar series and their own figures on 10 rabbits with a maximum of 2.73 and a minimum of 2.03 and an average of 2.38 gm. of heart per kilo of body weight. Sekiguchi[4] used as control his average of 2.04 gm. of heart per kilo of body weight obtained from the study of 10 normal rabbits.

In a series of 168 normal rabbits of Chinchilla, New Zealand, Red, White and Dutch Black strains and mixtures of these, with body weights varying from 900 to 3,000 gm. we have found the arithmetical mean of the HW/BW to be 1.972 gm. heart per kilo body weight, with a standard deviation of 0.299 and a probable error of ±0.015 for the mean and ±0.011 for the standard deviation. We also dissected 101 of these hearts in the fresh and divided them by the authors'[5] midseptal method into auricles, left and right ventricular masses. The left to right ventricular ratios (L/R) mean was 1.792 with a standard deviation of 0.138 and probable errors of ±0.0092 for the mean and ±0.0065 for the S. D. The mean normal auricular weight body weight ratios were 0.270 with an S. D. of 0.054 and for the auricular weight heart weight ratios mean was found to be 137 ± 23.

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Experimental Ablation of Posterior as Contrasted to Anterior Aortic Cusp on Cardiac Hypertrophy in the Rabbit.*

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During the progress of studies on the results of digitalization on experimental aortic insufficiency hypertrophy it was observed that the gross configuration of the hypertrophied heart appeared to differ. Some were globular in form whereas others were elongated or boot

[3] Wassermeyer, H., and Rohrbach, A., *Arch. f. exp. Path. u. Pharm.*, 1932, **166**, 375.

[4] Sekiguchi, R., *Ber. ges. Physiol.*, 1935, **87**, 1928.

[5] Herrmann, George, *Am. Heart J.*, 1925, **1**, 485.

* Supported by Grant No. 349 from the Committee on Scientific Research of the American Medical Association.