Our results indicate that by the time enough ergotamine has been administered to prevent the rise in blood pressure or to produce the blood pressure reversal effect by stimulation of the splanchnic nerve after ergotamine, the kidney vessels no longer react and are paralyzed so that stimulation produces only a small response which corresponds to the changes in blood pressure.

The reaction of the kidney vessels after small doses of ergotamine cannot be explained at present. Possibly the constrictor fibers to the kidney vessels are more sensitive to ergotamine than the other vessels, or their control over these vessels is less complete, consequently, they require less of this alkaloid to paralyze the endings, thus allowing the kidney vessels to react to adrenalin in the same manner that they do after section of the splanchnic nerve, *i. e.*, by dilatation.

The only direct response of the renal vessels seems to be constriction to adrenalin; all the other responses evidently are passive. The kidney volume increases or decreases as the blood pressure rises or falls.

The results of these experiments seem to indicate that the renal vessels are without vasodilator fibers and that the splanchno-peripheral balance probably plays the most important rôle in governing the vasomotor activities of the kidney and, consequently, kidney volume.

9334 P

Treatment of Serum Serving to Remove Its Serum-Sickness-Causing Activity.

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We have reported previously concerning a reaction appearing on the ears of rabbits[1] subsequent to an injection of either whole horse serum or fractions thereof, which may be considered as analogous to serum-sickness in human beings.[2] In addition, studies concerning the serum-sickness-causing activity of the various serum proteins led to the suggestion that the more important substance concerned in causing serum-sickness may be some agent other than

[1] Fleisher, M. S., and Jones, L., *J. Exp. Med.*, 1931, **54**, 597.

[2] Fleisher, M. S., and Jones, L., *J. Immun.*, 1933, **24**, 383.

the proteins themselves although this agent appears to be associated with the pseudoglobulin.[3]

It has been found that by the addition of adequate quantities of alkali or acid to serum (normal or immune), exposure of the mixture to heat and subsequent neutralization, the serum-sickness-causing activity may be destroyed so that rabbits injected with the customary amounts of serum will not develop manifestations of the disease.

In order to minimize or prevent damage to antibody incident to this type of treatment of serum, it is necessary to adjust the various factors concerned in the treatment of the serum. Six factors must be considered: 1, The amount of alkali used (between 0.2 gm. and 0.1 gm. for 100 cc. of serum when using NaOH); 2, the dilution of the mixture (from 1:2 to 1:10); 3, the temperature to which the mixture is exposed (from 45°C. to 55°C.); 4, the time of exposure (from 30 min. to 18 hr.); 5, the type of antibody in the serum; 6, the particular sample of serum being treated. The first 4 factors must be balanced against each other in relation to the last 2 factors.

By this method the serum-sickness-causing factor may be destroyed so that rabbits receiving treated serum (10 cc. per kg.) do not develop serum-sickness while rabbits injected with the same untreated serum develop manifestations of serum-sickness in 6 of 10 animals. In sera which are no longer active in causing serum-sickness. from 50% to 100% of the original protective antibody is retained.

9335

Changes in Ribs of Guinea Pigs Following Administration of Cattle Anterior Pituitary Extract. (*Acromegalic Rosary*).

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In previous investigations we could show that after 10 to 21 injections of acid extract of cattle anterior pituitary a growth effect becomes manifest in cartilage and bone of young guinea pigs. The

[3] Jones, L., and Fleisher, M. S., *J. Immun.*, 1934, **26**, 455.

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