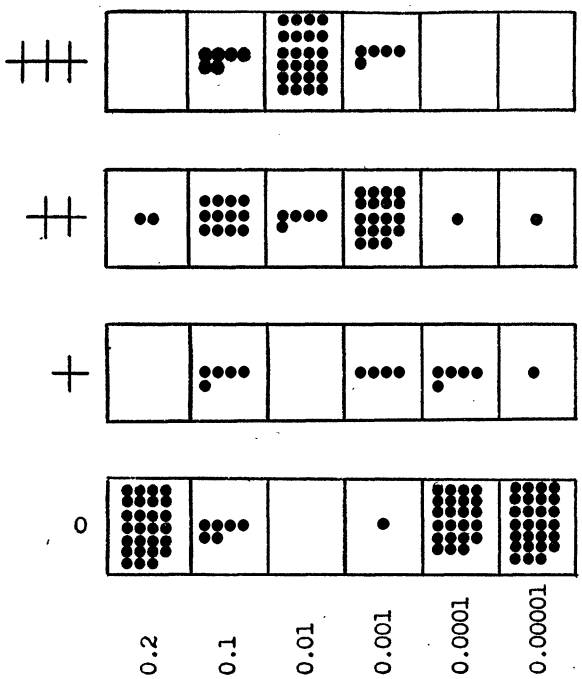
in support of the modified test does show that, when repeated at various intervals, changes occur which could be interpreted as indicative of increasing or decreasing dysfunction.

In the application of a similar procedure to routine studies, we studied a series of normal individuals, using the proposed fractional test.[3] It was noted that, whereas with 0.2 cc of undiluted blood serum a negative reaction would occur in nearly every instance, a positive reaction was noted when 0.1 cc of saline-diluted serum or less was employed (Fig. 1). This

FLOCCULATION AT VARIOUS DILUTIONS OF SERUM WITH SALINE



was particularly the case with greater dilutions of serum with saline, so that with 0.01 cc of diluted serum a definitely positive reaction usually occurred.

Accordingly, it is obvious that the fractional cephalin-cholesterol flocculation test by means of serial saline dilutions of blood serum is not a valid procedure for following alterations in hepatic function.

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[2] F. M. Hanger, *Jour. Clin. Invest.*, 18: 261, 1939.

[3] We are indebted to Dr. David Klein, The Wilson Company, for generous supplies of a standardized Cephalin-Cholesterol mixture.

A TECHNIQUE FOR DIFFERENTIATING THE CELLS OF THE PITUITARY OF THE RAT

IT is well known that procedures worked out for staining human tissues do not always give good results when used on animal tissues. In connection with some work done in this department it was necessary to devise a stain to differentiate the acidophils and basophils of the pituitary of the rat. Mallory connective tissue stain, using the procedure described in Mallory, "Pathological Technique," does not give satisfactory differentiation, but the adaptation here described, using somewhat different dye concentrations, different staining times and a different staining temperature, has given excellent results. The procedure is as follows:

Fixation: Fix in Helly's fluid and imbed in paraffin. Cut sections 4 micra in thickness.

Staining: (Note: Control each step under the microscope; all times given are average).

(1) Stain approximately 5 minutes in a 0.1 per cent. (aqueous) solution of acid fuchsin.

(2) Wash in water, then differentiate 1–2 minutes in water containing 8 drops glacial acetic acid per 100 cc.

(3) Aniline blue stain

Aniline blue (w.s.)	0.5 gm
Orange G	1.3 "
Phosphotungstic acid 1 per cent. (aqueous) solution	100.0 cc

Stain at 35–40 degrees C for 10–15 minutes. Wash off excess stain in water.

(4) Dehydrate quickly in 95 per cent. and absolute alcohols. Clear in xylol, mount in balsam.

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