

to establish the significance of the Colon-Aerogenes distribution in this age group.

It will thus be seen that the question of which Colon-Aerogenes organisms are fecal and which are not is greatly complicated. Under certain circumstances feces may furnish such quantities of normal and degraded Aerogenes, gelatin liquefying *Aerobacter* or *Cloacae*, and Intermediates as to make untenable the assumption that such forms necessarily come from such environmental sources as soils and grains. Furthermore, the finding of *Coli* typical of those of freshly excreted feces may be no guarantee that the *Coli* found indicate recent fecal pollution.†

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Blood Pressure Response to a Standard Stimulus in the White and Negro Races.

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A new concept of the etiology and pathogenesis of essential or arteriolar hypertension, based upon the neurogenic theory, has recently been brought forth by Hines and Brown.¹ According to them there exists a primary constitutional factor manifested by a hypersensitive or hyperreactive vasomotor system which is activated by secondary subsidiary factors in the form of environmental, infectious or toxic agents. Furthermore, they advanced the opinion that this constitutional abnormality should be capable of detection in early life, and, to attain this end, devised a standard vasomotor stimulus based upon the blood pressure response to the application of cold.

We have called attention² to our discovery of a rather striking difference in the incidence of hypertensive cardiovascular disease in the white and negro races in this locality. We, therefore, felt that, in view of this racial difference, an exceptional opportunity existed

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¹ Hines, E. A., Jr., and Brown, G. E., *Ann. Int. Med.*, 1933, **7**, 209.

² Schwab, E. H., and Schulze, V. E., *Am. Heart J.*, 1932, **7**, 710.

to investigate further the possible neurogenic basis of essential hypertension. The "Cold Stimulation Test", with certain modifications, was applied to 325 young adults, 172 white patients and 153 negroes, approximately equally divided as to sex, and ranging in age from 15 to 35 years, with an average age of 24 years. All subjects were free from cardiovascular disease and had normal blood pressures. After a period of rest in the recumbent position, control blood pressure readings were made at frequent intervals until a constant basal level was reached. The hand and wrist of the opposite arm were then immersed in cold water (4 to 5°C.), and determinations were made after 30, 90 and 150 seconds had elapsed. The hand was then removed and readings were made until the blood pressure had returned to its previous resting level.

The results of the study are given in Table I. The cases are grouped according to the height to which the systolic blood pressure rose during the application of the stimulus. The average resting systolic blood pressure in the white subjects was 112 mm. of mercury and 115 mm. of mercury in the negroes. It is clearly shown that as the systolic blood pressure level is gradually raised, the percentage of negro cases attaining a given level slowly begins to exceed that

TABLE I.
Comparative Analysis of the Blood Pressure Response to a Standard Vasomotor Stimulus in the White and Negro Races.

Highest Systolic Blood Pressure Obtained During Application of the Stimulus mm. Hg. or above	White Subjects		Negro Subjects	
	No. Cases	%	No. Cases	%
100	172	100.0	153	100.0
105	170	98.8	153	100.0
110	169	98.2	153	100.0
115	165	95.9	149	97.3
120	156	90.6	144	94.0
125	138	80.2	128	83.6
130	109	63.3	112	73.1
135	92	53.5	93	60.7
140	70	40.7	75	49.0
145	48	27.9	60	39.2
150	34	19.8	43	28.1
155	18	10.5	27	17.6
160	7	4.1	20	13.1
165	5	2.9	17	11.1
170	1	0.6	8	5.2
175	0	0	7	4.6
180	0	0	5	3.3
185	0	0	4	2.6
190	0	0	3	2.0
195	0	0	2	1.3
200	0	0	1	0.7
205	0	0	0	0

of the white subjects and as the higher elevations are reached the percentage difference progressively becomes more marked.

From these observations we may conclude that there is a quantitative difference in the blood pressure reaction to a standard vasomotor stimulus in the white and negro races. This finding indicates that a hypersensitive vasomotor mechanism is more frequently encountered in the negro than in the white race. In view of the greater incidence of hypertensive cardiovascular disease in the negro race, these results seem to add support to the newer neurogenic concept of the development of the disease.

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Action of Ovarian Follicle Hormone in Ovarian Insufficiency in Women as Indicated by Vaginal Smears.*

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The treatment of women with ovarian insufficiency by ovarian follicular hormone (OFH) has fallen short of the expectations aroused by its successful use in animals. It is possible that the amounts of hormone necessary to produce comparable changes in man are so large¹ as to be out of the question except for occasional brief studies in humans.² On the other hand the failures may have been due to the lack of objective criteria for estimating dosage and evaluating effects; or the choice of ineffective modes of administration.

The aim of this study was the development of an objective method for evaluating OFH action in ovarian insufficiency. The study of vaginal smears has been of great value in observing the effects of OFH in rodents and other mammals. Recent studies³ have demonstrated a cycle in the vaginal fluid of the human comparable to that in animals. The applicability of the vaginal smear method to the study of the effects of OFH in the human is briefly described in this report.

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¹ Parkes, A. S., and Zuckerman, S., *J. Anat.*, 1931, **65**, 272.

² Kaufmann, C., *Proc. Roy. Soc. Med.*, May, 1934.

³ Papanicolaou, G. N., *Am. J. Anat.*, 1933, **52**, supplement.