accompanied by a more rapid decrease in the concentration of phospholipid. This finding is consistent with the hypothesis that the proliferating cells provide enzymes for the chemical destruction of the lipids of the myelin sheath. Results similar to those reported above have been obtained with other groups of animals kept under a wide variety of dietary conditions.

Summary. The sciatic nerves of a group of rats 60 days old contained a higher concentration of both nucleic acid and phospholipid than the nerves of similar rats 160 days old. After section of the nerve there was an increase in the concentration of nucleic acid and a decrease in the concentration of phospholipid in both groups. These changes occurred more rapidly in the younger animals.

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Effect of Estrogens on Serum Lipids and Low Density Lipoproteins in Men and Women.* (19590)

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Gofman *et al.*(1) have demonstrated significant sex differences in the concentration of the Sf 12-20 beta-lipoproteins, in that women (25-40 years of age) showed about 25% less of these lipoproteins in their blood than men of similar age group. Since these lower values correlate well with the lower incidence of atherosclerosis in young women it seemed important to observe the effect of administering the sex steroid hormones on the serum lipids and lipoproteins in both sexes. Such observation might help to explain the observed sex differences in atherosclerosis. Eilert(2) did report that estrogens induced a sharp reduction in the ratio of total serum cholesterol to phospholipid because of a rise in phospholipid and a fall in total cholesterol. These findings are contrary to the observations being reported in this study.

Our clinical observations were derived from the study of 16 males and 15 females (whose ages range from 55-65 years) who were given estradiol† in variable physiologic doses of 0.25-0.75 mg daily for periods of 2-4 months. Blood specimens were taken before and at monthly intervals after the start of estrogen administration for the determination of the total serum lipids, cholesterol, cholesterol esters, phospholipids, cholesterol/phospholipid ratio, as well as the serum low density lipoproteins.‡

TABLE I. Average Values of Blood Lipids in Males and Females after Estrogen Therapy.

	Cholest.	Phospho-lipids	Ratio C/P*	Sf 10-20
		Females		
Before therapy	285	12.9	22.4	51
1 mo	290	12.7	23.1	52
2	282	11.4	24.7	55
3	282	12.6	22.4	51.4
		Males		
Before therapy	248	10.9	23	55.2
1 mo	244	9.7	25.1	49.4
2	270	11.1	24.2	52.8
3	266	10.5	25.3	54.7

* Ratio of cholesterol to phospholipids.

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† Supplied by the Schering Corp., Bloomfield, N. J.

‡ All ultracentrifugal determinations were performed at the Donner Laboratory, University of California, Berkeley.

TABLE II. Effect of Estradiol, .75 mg Daily, in a 64-Year-Old Male.

	Sf 10-20	Cholest.	Cholest. esters, %	Phospho-lipids	Ratio C/P*	Total lipids
1/25	43	201	73	8.1	24.9	610
	Medication–started					
2/15	66	178	76	8.3	21.4	550
3/1	36	219	74.5	8.7	25.2	470
3/29	57	235	70	9.7	24.2	510
5/5	59	265	68	10.1	26.2	520
	Medication–stopped					
6/7	55	210	75	9.5	22.1	480

* Ratio of cholesterol to phospholipids.

TABLE III. Effect of 5 mg Estradiol Dipropionate I.M. in a 25-Year-Old Female Castrate.

	Sf 10-20	Cholest.	Phospho-lipids	Ratio C/P*	Total lipids
2/12	36 (inj.)	287	12.4	23.1	700
14	49	260	14.2	18.3	680
16	41	304	12.4	24.5	610
20	29	280	15.4	18.2	630

* Ratio of cholesterol to phospholipids.

To test the influence of larger doses of estrogen on these lipid factors 5.0 mg of estradiol was injected in 4 subjects, one of whom was a young female castrate (Table III).

No dietary nor any other medical management was changed during these experimental trials.

The data obtained are summarized in Table I. Table II shows the values obtained in a 64-year-old man in whom the doses used caused tenderness and hypertrophy of the breasts.

It is readily apparent that the administration of estrogen is followed by no marked nor sustained change in any of the serum lipid factors nor in the cholesterol-phospholipid ratio, nor did analysis of the Sf 12-20 lipoproteins show any consistent trend.

In our hands no evidence has been obtained to indicate that estradiol in either physiological or pharmacological doses influences the serum lipids or the low density lipoproteins.

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Ineffectiveness of 688A (N-Phenoxyisopropyl-N-Benzyl-β-Chloroethylamine Hydrochloride) in Treatment of Essential Hypertension. (19591)

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(Introduced by Irvine H. Page.)

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Certain chloroethylamine derivatives can in varying degree block adrenergic and sympathetic activities. Thus, some patients with essential and malignant hypertension respond to intravenous injection of Dibenamine by more or less prolonged decreases of arterial pressures(1,2). Availability of an orally active(3) drug of this type, 688A prompted observations of its effectiveness in the prolonged treatment of essential hypertension. As this study was completed, Haimovici, Moser and Krakauer(4) reported preliminary studies which indicated that 688A was therapeutically effective in essential hypertension.

Methods. This report is based on data from 8 of 25 patients treated; some observations are omitted or briefly noted because a) the drug was sometimes used in the terminal phases of malignant hypertension (6 patients), b) concurrently with another drug (with