

Data on 11 Women Taking Oral Contraceptives										
Patient	Age	Diagnosis	Regimen, Dates	Blood Pressure (mm Hg)	Aldosterone Excretion (μ g/day)	Urinary Sodium Excretion Rates (mEq/day)	Serum Renin Activity (μ g Angiotensin per ml for 4 hr Incubation)	Serum Renin-Substrate (μ g Angiotensin Generated per ml)	Substrate Reactivity (μ g/ml)	Clinical Information
1	44	Essential hypertension	(Ortho-Novum 10 mg for 2 yr) 11/30/64 (Day 12) 9/3/65 (Off 7 mo)	160/112 ...	41* 14	67 128	5.8 5.2	3,785 1,085	80 30	Hypertension 7 yr. No change in hypertension off pill.
2	34	Advanced hypertension	(Enovid 10 mg since 1/64) 8/19/64 (Day 5) 9/2/64 (Day 19)	230/140 230/140	610 SR† 508 SR	92 79	16.7 10.6	6,350 8,650	80 86	Hypertension known since 1959—during pregnancy. Grade 3 retinopathy. Hypokalemic alkalosis. Normal renal function continues on contraceptive therapy.
3	38	Essential hypertension	(Enovid for 3 yr) 5/19/66 (Off 10 days) 7/19/66 (Off 2 mo) (Resume Enovid 7/21/66) 9/13/66 (Day 4) 10/14/66 (Day 5)	200/110 145/100 170/105 180/110	... 5.1 6.5 4.4	... 85 149 118	1.6 3.6 1.8 1.2	875 635 1,145 920	44 31 47 36	Hypertension known for 5 yr. Thyrotoxicosis developed 6/66. BP appears higher during contraceptive therapy.
4	34	Renal hypertension	(Ortho-Novum 2 mg since 2/65) 9/16/65 (Day 17) 9/22/65 (Off 3 days) 10/10/66 (Stopped 10/11) 11/14/66 1/10/67	180/105 180/110 180/110 130/80 130/80	9.9 6.3 9.4 9.1 ...	56 300 72 110 ...	9.9 8 7.5 6.0 1.4	4,100 3,300 4,550 1,725 940	 63 40 43	Renal hypertension known since 1964—during fourth pregnancy. Had right nephrectomy, 1963, for kidney infection. Proteinuria 2+; BUN level normal. BP remarkably improved on stopping contraceptive therapy as aldosterone, renin-substrate, and substrate reactivity return to normal levels.
5	49	Essential hypertension	(Enovid E 2.5 mg for 3 yr) 6/24/65 (Day 12)	180/105	21	121	28	8,085	...	BP repeatedly normal prior to start of Enovid. Continues on medication.
6	30	Essential hypertension	(Enovid E; 3/65 to 8/10/66) 7/20/66 (Off 4 days) 7/26/66 (Day 4) 8/1/66 (Day 10) 8/22/66 8/26/66 8/31/66 10/11/66 11/15/66 1/31/67	160/110 165/115 160/110 140/110 140/95 120/80 140/80 135/108 160/115	52 32 32 22 12 46 16	1.4 160 98 71 193 3.9 166	21 12 16.8 3.9 4.8 5.8 4.3	3,505 3,200 2,925 1,430 970 1,000 860	82 80 94 60 45 50 29	Hypertension first discovered 4/65, shortly after starting oral contraceptives, headaches frequent. Serum potassium range 2.7 to 3.9 mEq/liter on Enovid. Serum potassium range 3.7 to 3.9 mEq/liter after stop. Metabolism ward study of changes in salt balance revealed striking improvement in renin, aldosterone, and substrate reactivity after terminating contraceptive medication. BP has not been corrected.
7	41	Renal hypertension	(Enovid 5 to 10 mg daily for 5 yr) 9/21/66 (Stopped 9/22) 12/10/66	220/120 140/100			4.1 4.4	2,795 1,610	94 38	Chronic renal insufficiency with azotemia. BUN level, 70 mg/100 cc. Hgb level, 6.8 gm/100 cc. Hypertension known only last 3 yr, improved after stopping Enovid therapy.
8	32	Essential hypertension	(Enovid 5 mg; 1963 to 2/66) 5/25/66 (Ortho-Novum 2 mg; 6/11/66 to 9/21/66) 6/23/66 9/21/66 10/3/66 10/26/66 1/4/67	130/80 120/80 200/130 190/130 160/110 130/80	23 30 36 19 19 20	80 122 101 117 116 225	4.7 12.7 5.5 4.8 6.9 4.2	850 1,980 4,070 3,360 1,400 980	27 73 90 60 38 46	Hypertension discovered 1/66. Diabetes discovered 2/66. Frequently normotensive in past. Takes 40 units insulin daily. Hypertension appeared during therapy with Enovid; disappeared after its cessation; reappeared with Ortho-Novum; and disappeared again after stopping medication.