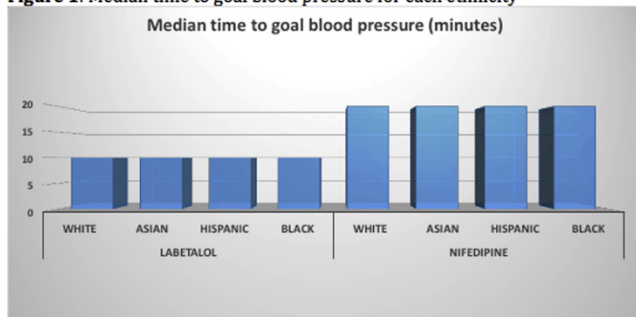


they were equally effective in terms of doses required to achieve goal blood pressure.

**Table 1.** Patient demographics and clinical history.

	All Patients (N = 109)		Labetalol (N = 55)		Nifedipine (N = 54)		P-value
	N	Mean ± SD or Median (IQR) or No. of Patients (%)	N	Mean ± SD or Median (IQR) or No. of Patients (%)	N	Mean ± SD or Median (IQR) or No. of Patients (%)	
Age, years	109	34.59 ± 6.05	55	35.49 ± 6.25	54	33.67 ± 5.74	0.12
BMI, kg/m <sup>2</sup>	108	28.86 ± 6.50	54	27.89 ± 6.36	54	29.84 ± 6.54	0.12
Gestational age, weeks	102	37.1 (35, 38.7)	53	37.4 (36.3, 38.6)	49	36.9 (34.6, 38.9)	0.21
Ethnicity							0.64
Black	109	42 (38.5)	55	20 (36.4)	54	22 (40.7)	
White, Asian, or Hispanic	109	67 (61.5)	55	35 (63.6)	54	32 (59.3)	
Post-partum	109	7 (6.4)	55	2 (3.6)	54	5 (9.3)	0.27
Chronic Hypertension (CHTN)	109	18 (16.5)	55	9 (16.4)	54	9 (16.7)	0.99
Gestational Hypertension (GHTN)	108	26 (24.1)	55	12 (21.8)	53	14 (26.4)	0.58
DM Type I or II	108	4 (3.7)	55	2 (3.6)	53	2 (3.8)	>0.99
Family History of HTN	109	55 (50.5)	55	26 (47.3)	54	29 (53.7)	0.50
History of Smoking	109	21 (19.3)	55	9 (16.4)	54	12 (22.2)	0.44
Pre-medication, Initial Assessment							
Systolic	109	172.86 ± 11.99	55	173.96 ± 12.74	54	171.74 ± 11.19	0.34
Diastolic	109	95.62 ± 10.21	55	94.18 ± 10.02	54	97.09 ± 10.28	0.14

**Figure 1:** Median time to goal blood pressure for each ethnicity



**21 Cerebral autoregulation in eclampsia**

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**OBJECTIVE:** Eclampsia is the occurrence of tonic-clonic seizures in pregnant or recently postpartum women with preeclampsia. The etiology of these convulsions is unknown. Cerebral autoregulation (CA) is a physiological process that maintains blood flow constant despite changes in blood pressure (BP). Impaired CA may cause overperfusion injury, edema formation and neurological symptoms. We tested the hypothesis that eclampsia is associated with impaired cerebral autoregulation.

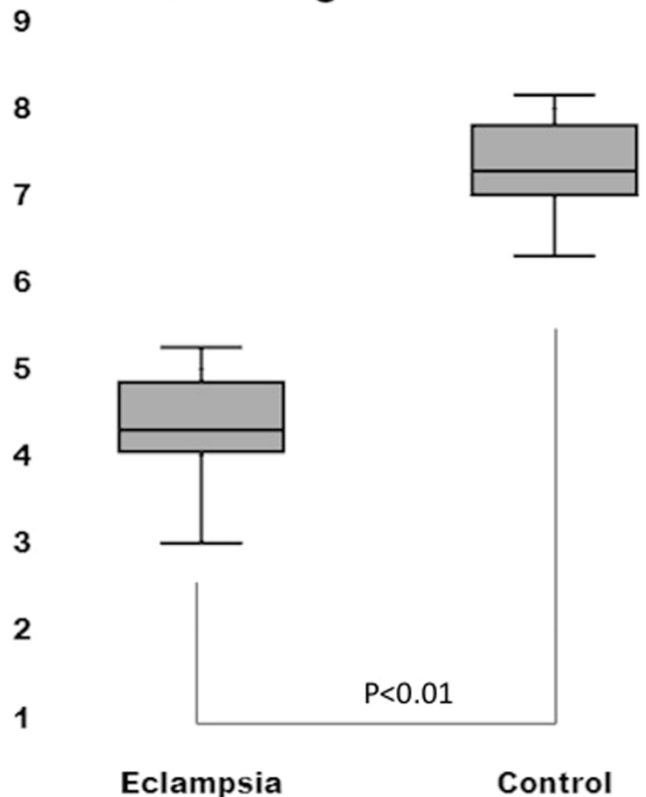
**STUDY DESIGN:** In a prospective cohort study of recent postpartum patients, we included eclamptic patients studied at < 48 hour after the insult (n=7), and compared them with a normotensive control group (n=10), matched for gestational age (EGA). Eclamptic patients received MgSO<sub>4</sub> and anti-hypertensive therapy according to local protocol. Preterm delivery in the control group was due to spontaneous preterm birth or fetal distress. Cerebral blood flow velocity (CBFV) in the middle cerebral artery (transcranial Doppler ultrasound), BP (noninvasive arterial volume clamping), and end-

tidal carbon dioxide (EtCO<sub>2</sub>) were recorded during a 7-minute period of rest. Autoregulation Index (ARI) was determined from the CBFV responses to spontaneous fluctuations in BP. ARI values of 0 and 9 indicate absent and perfect autoregulation, respectively. Cerebral perfusion pressure (CPP) was calculated as previously described. Statistics: student t-test, with P < 0.05 considered significant. Data are presented as mean ± SD

**RESULTS:** The groups had similar EGA at delivery (33.6 ± 5.3 vs 34.1 ± 4.4 weeks) and no patients had neurological symptoms at time of recording. ARI was significantly reduced in eclampsia (ARI 4.3 ± 0.7) when compared to controls (7.4 ± 0.5, P < 0.01), while CPP was higher (108 ± 13 vs 82 ± 19 mmHg, P < 0.01). EtCO<sub>2</sub> was similar (34.8 ± 1.4 vs 33.8 ± 1.8 mmHg).

**CONCLUSION:** Women with a recent eclamptic insult have severely impaired CA and increased CPP compared with gestational age-matched normotensive women. Further research should focus on possible modifiable factors to improve CA and on the association between CA and long-term neurological outcome after eclampsia.

**Autoregulation index**



**22 Intravenous labetalol versus oral nifedipine for acute hypertension in pregnancy: effects on cerebral perfusion pressure**

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