Co-Dergocrine Mesylate (Hydergine) and Hypertensive Emergencies

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Dear Sir,

Co-dergocrine mesylate (Hydergine®) has frequently been used in the treatment of senile dementia [1]. When given intravenously, blood pressure is lowered by peripheral vasodilation without increasing cardiac output or inducing tachycardia [2]. We studied Hydergine hypertensive efficacy in 9 patients with hypertensive emergencies. Five were female and four male, aged from 49 to 60 years (average: 54 ± 4 years). All patients had diastolic blood pressure after 30 min rest equal to or more than 120 mm Hg. Depending on the degree of the cardiovascular repercussion on their blood pressure, 5 patients could be included in stage II of the WHO (2 males and 3 females), and 4 patients in stage III of the WHO (2 males and 2 females).

A dose of 1.5 mg i.v. of Hydergine (0.5 mg in bolus +1 mg diluted in 50 cm³ of 5% glucose solution, in perfusion for 20 min) was given. Blood pressure and heart rate were measured at 5, 15, 30, 45 and 60 min after

administration of the drug. Results were statistically analyzed with Student's t test. In all patients a significant early hypotensive response was observed, beginning 5 min after drug administration and lasting up to 60 min. None of the patients had tachycardia (see table I). The maximum response was 30 min after administration of the drug, in lowered blood pressure without secondary effects or discomfort. Only 1 patient experienced sudden hypotension at 15 min. He had been previously treated (60 min before) with 10 mg of sublingual nifedipine, and 40 mg of intravenous furosemide. Hypertensive emergency can be treated with numerous drugs. Some of them have secondary effects, and patients need to be monitored after administration. Intravenous Hydergine has recently been used in the treatment of hypertensive emergency with excellent results [3]. Our results confirm that intravenous Hydergine is a powerful hypotensive agent comparable with the other drugs traditionally used [4, 5]. No side effects or reflex tachycardia are produced. Hydergine is known to be a very potent α -receptor

Table I. Basal blood pressures and blood pressure after 1.5 mg i.v. Hydergine administration in 9 severely hypertensive patients

“ $p < 0.03$; ** $p < 0.001$; *** $p < 0.0001$. SBP = Systolic blood pressure; DBP = diastolic blood pressure; HR = heart rate.

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blocker, but the fall in heart rate is more in keeping with a central and peripheral action, possibly as an agonist of serotonin and dopamine receptors [1–3].

In conclusion hypotensive intravenous Hydergine effect begins at 5 min and lasts for 1 h. Blood pressure does not need to be closely monitored, and the patient can afterwards be treated (as an outpatient) with oral drugs.

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