

07. Efficacy of iv infusion of magnesium sulphate and droperidol on the management of neuropathic and somatosensory chronic pain - a two pain center study

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Introduction: Droperidol as a medicine has unique properties and it has been successfully used as analgesic, antipsychotic, antiemetic and as a sedative [1]. It is an antagonist for d2-dopamine, serotonin, histamine, and nicotinic and muscarinic cholinergic receptors. It is also a dose-dependent agonist/antagonist of GABA receptors and an agonist of α_2 adrenergic receptors. Moreover, is a sodium channel blocker such as lidocaine and potentiate μ opioid receptors. Its multi-receptor action justifies its use as analgesic, antiemetic and antipsychotic medication [2]. Magnesium seems to function as an antagonist for NMDA receptors and it has been used for relief of acute and chronic pain [3, 4]. The aim of the current study is the evaluation of the efficacy of droperidol and magnesium co-administration on the patients with chronic pain

Method: All patients that attended the pain clinic for chronic pain and aged over 18 years old were included in the study. Patients with atrioventricular block any grade and patients with chronic renal failure were excluded from the study. All included patients received droperidol to the dose 2.5 mg maximum and 1 gr magnesium sulphate iv. DN4 questionnaire was used to assess the presence of neuropathic pain. VAS scale and NPS scale were used to assess the intensity of pain before and after the administration. Change in the pain scales calculated as a percentage.

Results: 48 patients included in the study. 23 of them had neuropathic pain. There was a 40–50% reduction of the intensity of pain after iv administration of droperidol and magnesium. There weren't any complications.

Conclusions: The co-administration of magnesium and droperidol can relieve neuropathic and somatosensory pain. Long-term evaluation is needed.

References

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