

HEB

JOHP

Comparison of Analgesic Efficacy and Tolerability of Tapentadol With That of Tramadol In Acute Traumatic and Postoperative Pain

Amit S. Shrivastav¹, Khyati D. Rokadia¹, Punam D. Sachdeva^{1}*

Department of Pharmacology, A. R. College of Pharmacy & G.H Patel Institute of Pharmacy, Vallabh Vidyanagar, Dist. Anand, Gujarat, India

Address for Correspondence: editojohp@gmail.com

ABSTRACT:

Post-operative pain is a type of acute pain which sensitizes the peripheral and central pain pathways and thus causes pain. If it is not relieved it can lead to extended hospitalization, compromised prognosis and a number of complications like depression and anxiety. It is known that substances which have prominent antinociceptive effects are general inhibitory neurotransmitters and their action is mediated by activation of descending inhibitory pathways which inhibit pain. Opioid analgesics acting by stimulation of opioid receptors are the basis of pharmacological management of post-operative pain, but they have the tendency to cause tolerance. Hence physicians are reluctant to prescribe these drugs in sufficient doses to relieve pain. Tramadol and Tapentadol have a combined mechanism. Both are centrally acting analgesics with weak opioid agonist property and affect Noradrenaline and 5-HT transmission. Hence these drugs were evaluated for their efficacy and tolerability. 5 days, single centre, randomised, double blind, prospective study was carried out. 60 patients were recruited in the study. Each patient was prescribed either Tramadol IR (50mg) or Tapentadol IR (50mg), randomly, thrice a day for 5 days. Analgesic efficacy was assessed by measuring pain intensity score of the patients before treatment and daily once in the morning for 5 days. Base line pain intensity score and score after treatment with Tramadol and Tapentadol was recorded for 5 days and was found to be reduced. Also lower incidence of adverse effects was observed in patients prescribed Tapentadol as compared to Tramadol suggesting better tolerability profile of Tapentadol.