Introduction:
Analgesia in the critical patient, and especially in the neurocritical patient, is a basic goal in all therapeutic practices. Patients in the ICU are frequently administered prolonged and/or high doses of opioids. Multiple serious complications due to the use of infusion of opioids at large doses has been described. To reduce high doses of intravenous opioids, multimodal forms of analgesia can be used.

Methods:
Prospective observational study of the use of tapentadol enteral and buprenorphine in transdermal patches, at low doses, for the control of pain and its effect on reducing the use of fentanyl infusion in high doses on 84 patients admitted to Neuro ICU of INDISA Clinic during 2 consecutive years (2018-19). Enteral tapentadol (through NG tube) 50 mg/6 hours, was considered in patients who required intravenous fentanyl in continuous administration. Buprenorphine was also added at low doses (5 ug/hr) in a weekly transdermal patch, in cases of neurosurgical spine patients, fractures and long-term neuropathic pain. Pain was controlled on Behavioral Pain Scale (BPS) and Visual Analogical Scale (VAS) scores, according to the conditions of each patient. Their hemodynamic, gastrointestinal complications and the appearance of delirium episodes according to CAM-ICU scale were recorded.

Results:
84 patients received tapentadol. 32 of them also received transdermal buprenorphine. All managed to maintain adequate level of analgesia, not requiring fentanyl at doses greater than 0.5 ug / kg / hr. Distribution by diagnoses: Neurotrauma 21 patients, Guillain Barre 12, Spine Surgery 15, HSA 18, HICE 10, Malignant Ischemic ACV 8. Complications: Gastric Retention 12 patients (7%), Hypotension 1 (1%), Acute Hypoactive Delirium 3 (3.5%), Acute Hyperactive Delirium 8 (9%). No drug interactions were found.

Conclusion:
The introduction of enteral tapentadol and buprenorphine patches in neurocritical patients was safe and resulted in a decrease in the use of endovenous opioids and its adverse effects.