Control of post operative pain by pre-TONSILLECTOMY peritonsillar infiltration-paper
Dr. Shamendra Kr. Meena (Assistant Professor), Dr. Rajkumar Jain, Dr. Vijay Kumar Meena
Department of Otorhinolaryngology, Govt. Medical College, Kota, Rajasthan

Introduction
• Pain is a highly unpleasant sensory and emotional experience
• Tonsillectomy is a very common day care procedure that is associated with significant postoperative pain
• Lack of pain management can lead to delays in oral intake of patients, resulting in extended stays and increased costs, sometimes dehydration.

28 patients (age group 5 to 35yr) assigned for tonsillectomy. The study conducted at Otorhinolaryngology department, MBS Hospital Kota, from August 2010 to August 2011.

The present prospective comparative study is designed to evaluate the post operative analgesic efficacy of pre-tonsillectomy peritonsillar infiltration using tramadol, ketamine, xylocaine–adrenaline combination & normal saline as a control.

Material and method
• Patients randomly divided into 4 equal study groups (n=7)
• Group I - patients received PT saline infiltration as a control group
• Group II - patients received xylocaine - adrenaline PT infiltration
• Group III - patients received tramadol (2mg/kg) infiltration alone
• Group IV - patients received ketamine (0.5mg/Kg) infiltration alone

Exclusion criteria
Patients with history of bleeding diathesis, allergy to study drugs & tonsillar abscesses.

The present prospective comparative study is designed to evaluate the post operative analgesic efficacy of pre-tonsillectomy peritonsillar infiltration using tramadol, ketamine, xylocaine–adrenaline combination & normal saline as a control.

All medication prepared as 2ml in volume and injected as 1ml per tonsil 3 minutes prior to incision Tonsillectomy was performed by dissection & snare method. Before making incision, infiltration of tonsillar bed was done through ant. pillar with various analgesic agents like Xylocaine – Adr combination, Ketamine, Tramadol & normal saline (control).

Benefits of infiltration
• Advantage of pre-tonsillectomy infiltration in tonsillar bed by these agents provides very good postoperative analgesia
• It provides early and easy oral feeding that prevent dehydration and problems with oral analgesic agents, results in decrease morbidity
• It decreases psychological & financial burden and decrease hospital stay.

LIGNOCAINE(LIDOCAINE)
• No/minimal local irritant action
• Blocks sensory nerve endings, nerve trunks, neuromuscular junctions, ganglionic synapses & non selective receptors, i.e structures which function through increased Na+ permeability.
• Also reduce release of acetylcholine from motor nerve endings. When injected around a mixed nerve that causes anaesthesia of skin & paralysis of voluntary muscle supplied by that nerve.

KETAMINE
• Binds noncompetitively to phencyclidine recognition site on N-methyl-D-aspartate receptors
• May exert effects at other sites including opioid receptors, monoaminergic receptors, muscarinic receptors & voltage-sensitive sodium & L-type calcium channels
• Suppressed TNF-alfa & IL-6 production & Nuclear factor kappa-B activity

TRAMADOL
• Centrally acting analgesic
• Inhibit reuptake of NA & 5-HT
• Medium intensity short lasting pain
• Significant decrease of substance-p & IL-6
• Ameliorate the release of nociceptive mediators as serotonin, bradykinin, substance-p & histamine

Conclusion
• Tonsillectomy is a very common day care procedure that is associated with significant postoperative pain
• Lack of pain management can lead to delays in oral intake of patients, resulting in extended stays and increased costs, sometimes dehydration.
• My study conducted on 28 patients (age group 5 to 35yr) assigned for Tonsillectomy to evaluate the post operative analgesic requirement after pre-tonsillectomy peritonsillar infiltration using tramadol, ketamine alone and in combination with bupivacaine, xylocaine - adrenaline & normal saline as a control shows that the requirement of 1st dose of analgesic is ranging from 3 hrs to more than one and half day.

Advantage of preincisional infiltration by various agents provides:
• Good postoperative analgesia
• Decreased morbidity
• Provides early and easy oral feeding
• Decreases psychological & financial burden
• Decreases Hospital stay.
Acknowledgements

The authors reported no conflict of interest and no funding was received on this work.

REFERENCES