INTRA VENOUS PARACETAMOL, MORPHINE AND THEIR COMBINATION FOR POSTOPERATIVE PAIN AFTER RELEASE OF POST BURN NECK CONTRACTURES

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Abstract
Maintenance of air way in cases of opioid induced-postoperative respiratory depression is not easily accomplished after release of neck contracture due to neck immobility and bulky dressing done by surgeon to secure the grafted skin and possible difficult intubation. We aimed to evaluate and compare the use of intravenous paracetamol to replace or to reduce morphine requirements for more safe postoperative pain management after release of post burn neck contractures.

Thirty patients undergoing surgical release of post burn neck contractures were randomly allocated into 3 groups (n=10 each) where patients received immediately after extubation one of the following medications: Paracetamol 1G IX (P group), morphine 0.1 mg/kg (M group), both morphine 0.05mg/kg and paracetamol 1Gm (P-M group). Efficacy parameters were subjective pain scores, sedation and satisfaction scores, number of patients required and total dose of rescue boluses of morphine (3mg) and time to first request of analgesia. Repeated measures ANOVA and t-test were used for comparisons through SPSS software.

No statistically significant difference were found between P, M and P-M groups regarding pain (except in first 15 min. in PACU) and satisfaction scores, with significantly less sedation score in P group. Time to first request for rescue analgesia was significantly longer in M and P-M groups compared with P group. Adverse events (respiratory depression and nausea or vomiting) were more frequent in morphine group.

We concluded that I.V paracetamol could effectively reduce morphine requirements by 60% or even replace it with less incidence of adverse events and more safer course during postoperative pain management after release of post burn neck contracture in adults. However, it would be better if we started paracetamol earlier before extubation.