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Abstract Title:

Evaluation of Pentrox analgesia for intralesional Bleomycin therapies

Abstract Text:

Background:

Methoxyflurane has been used for as an analgesic for trauma pain and minor surgical procedures in Australasia and was introduced to UK practice in January 2016, it has been shown to be a safe and effective analgesic for many procedures^{1,2}. In our hospital intralesional Bleomycin therapies have been delivered with Remifentanyl as analgesic and sedative. We identified Methoxyflurane as an alternative agent that may provide superior analgesia, increased convenience and fewer complications.

Aims and Objectives:

Evaluate the introduction of Pentrox for analgesia in intralesional Bleomycin therapy.

Methods:

Methoxyflurane is administered in the form of a Pentrox inhaler, which contains 3ml of methoxyflurane 99.9%. Patients were instructed on self administration and told to inhale intermittently to achieve adequate analgesia of rapid onset.

Patients were not given Pentrox if they had any contraindications, which were: renal impairment, liver damage as a result of previous methoxyflurane or halogenated hydrocarbons, malignant hyperthermia, hypersensitivity to Pentrox or fluorinated anaesthetic, altered level of consciousness, cardiovascular instability or respiratory depression.

Thirty eight patients were evaluated and six factors were scored as either poor, acceptable or excellent, these were: ease of administration, analgesia, sedation, patient acceptability and surgeon acceptability. Adverse effects were also noted for each case.

Results:

Analgesia was excellent in 21(55%), acceptable in 14(37%) and poor in 3(8%). Level of sedation was excellent in 27(71%), acceptable in 9(24%) and poor in 2(5%). Ease of administration was excellent in 35(92%) and acceptable in 3(8%). Patient acceptability was excellent in 29(76%), acceptable in 7(18%) and poor in 2(5%). Surgeon acceptability was excellent in 32(84%), acceptable in 4(11%) and poor in 2(5%). One procedure was abandoned due to inadequate analgesia, one patient experienced coughing and shivering immediately following the procedure, two patients had episodes of desaturation due to over sedation and one patient displayed resistance to Pentrox on two separate occasions. A number of patients experienced initial discomfort on needle penetration so topical 4% Lidocaine was introduced in later cases.

Conclusions:

We found Pentrox to be easy to administer and well tolerated, it was acceptable to the majority of patients and operators especially when combined with topical Lidocaine to cover initial injection. During the evaluation we learned the importance of adequate patient education and instruction to avoid over sedation. Pentrox also has a potential cost benefit in that the drug itself is cheap and length of stay may be shorter due to minimal recovery time.

References:

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2. Coffey F, Wright J, Hartshorn S, et al. STOP!: a randomised, double-blind, placebo-controlled study of the efficacy and safety of methoxyflurane for the treatment of acute pain. *Emerg Med J* 2014; 31: 613e8