A Continuous Infusion Fascia Iliaca Compartment Block in Hip Fracture Patients: A case control feasibility Study

Amit Sharma, Trauma Surgeon, Luton and Dunstable hospital, Luton, LU40DZ, UK Foldi Istvan, Anaesthesia specialist, Luton and Dunstable hospital, Luton, LU40DZ, UK Adrian Lopez Pradere, Anaesthesia specialist, Luton and Dunstable hospital, Luton, LU40DZ, UK

Background

The use of fascia iliaca compartment block has been shown to be effective in controlling pain in both hip fractures.

It prevents side effects from opiate medications like urinary retention, sedation, falls, acute delirium. Delirium has been identified as a variable that delays ambulation and necessitates placement for rehabilitation



Material and Method

-

We used continuous infusion using pain buster device, a disposable closed elastomeric device, for the continuous regulated infusion of local anaesthetic

It delivers local anaesthetic to the operative site for 48 hrs following surgery

We prospectively studied 13 patients and used 13 age matched controls undergoing hip fracture treatment, in the immediate post operative period. Main emphasis was to study the use of opiates (measured in oral morphine equivalents), pain score postop and mobilisation.

Results

Total patients in each arm:- 13

Male: female in each arm :- 6:7

Operations matched in each arm of the study :- Hemiarthroplasty:Nailing :DHS. = 3:5:5

| Average VA Pain score | Trial. | Control | |
|-----------------------|--------|---------|------------------------------------|
| Day 1. | 2.62. | 3.79 | |
| Day2. | 2.41. | 3.5. | Mann-Whitney U Calculator:- U 32.5 |
| | | | P value:0122 |
| Average opioid usage | | | |
| Day 1. | 4.5 mg | 12 mg | |
| Day2. | 4mg. | 11.4mg. | Mann-Whitney U Calculator:- U 8 |
| | | | P value:0067 |
| Mobilisation bed to | | | |
| chair%in 1 day | 40. | 40 | |

Discussion

We demonstrated the benefits of a continuous fascia iliaca compartment block placed post operatively as measured by significant difference in pain score and opioid consumption.

This was a small pilot study that will facilitate a study with many more patients.