

## **ED nurse initiated Fascia Iliaca Blocks (FIB's) for patients with fractured neck of femurs; from theory to practice.**

**Julie Gawthorne**<sup>1</sup>, A/Prof Steven Faux<sup>2</sup>, Dr Jenny Stevens<sup>3</sup>, Dr Andrew Finckh<sup>4</sup>, Jacqui Jensen<sup>5</sup>, Melissa O'Brien<sup>6</sup>, Dr Liz Harper<sup>7</sup>

1 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [julie.gawthorne@svha.org.au](mailto:julie.gawthorne@svha.org.au)

2 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [steven.faux@svha.org.au](mailto:steven.faux@svha.org.au)

3 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [jennifer.stevens@svha.org.au](mailto:jennifer.stevens@svha.org.au)

4 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [andrew.finckh@svha.org.au](mailto:andrew.finckh@svha.org.au)

5 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [jacqueline.ensen@svha.org.au](mailto:jacqueline.ensen@svha.org.au)

6 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [melissa.obrien@svha.org.au](mailto:melissa.obrien@svha.org.au)

7 St Vincent's Hospital, Victoria Street Darlinghurst, NSW, 2010, [lizabeth.harper@svha.org.au](mailto:lizabeth.harper@svha.org.au)

**Aim:** The aim of the project was to improve pain assessment and management in patients over 75 years presenting to St Vincent's Hospital Emergency Department (ED) with traumatic injuries. A multi-disciplinary working party was established to standardise pain assessment tools and developed analgesia guidelines for elderly patients based on best practice. Specific to the guideline was the introduction of nurse initiated Fascia Iliaca Blocks (FIB) in the ED for patients with fractured neck of femur (NOF).

**Method:** A clinical file review was conducted using a best practice bundle of care audit. All inpatients over the age of 75 years who had been admitted with a fractured NOF were included. Patient healthcare records were reviewed in 2011 and again in 2013 and 2014 post implementation of the program.

**Implementation:** A multidisciplinary team was established including medical and nursing staff from the emergency Department, geriatrics, rehabilitation, acute pain service, anaesthetics, pharmacy, trauma, orthopaedics and the patient safety and quality unit. A pain management guideline for patients over 75 years of age was developed based on current best practice evidence. The guideline included the introduction of FIB's, a procedure not routinely performed.

Pain assessment tools were standardised to two, the verbal numerical rating score (VNRS) and the Abbey pain scale. The abbey pain scale was a new tool introduced to assess pain in confused patients. Policies were written to accompany the change

A formal nursing and medical credentialing program for FIB insertion was developed including a video, practical workshop (including simulation using live models and pig torsos), and competency based assessment. 14 senior ED nursing staff completed the credentialing process. An intensive education program was conducted for medical and nursing staff across the hospital.

A patient information brochure was developed in consultation with consumers.

**Results:** Post implementation of the guideline 73% of patients with fractured NOF had a fascia iliaca block (FIB) inserted compared to 2% pre guideline. One third of all FIB's were inserted by nursing staff. 73% of patients had regular paracetamol prescribed compared to 34% pre guideline and 68% patients had regular opioids prescribed compared to 26% pre guideline. Average length of stay (LOS) in the emergency department has decreased from 23 hours to 9 hours and the average hospital LOS has decreased from 13 to 10 days. Delirium rates decreased from 45% to 33% despite an increase in patient's age and history of dementia.

There have been no adverse events associated with nurse initiated FIB insertion. The guideline has now been adopted by the Agency for Clinical innovation (ACI) for state wide implementation across NSW.

**Conclusion:** Implementation of evidence based pain management guidelines specific to patients over 75 years has seen a significant improvement in pain management. This study has shown appropriately trained ED nurses can safely and effectively insert FIB's in patients with fractured NOF's.

