PATIENT-CONTROLLED ANALGESIA IN POST-CAESAREAN SECTION

Deborah Mangion, Janis Vella, Lilian M. Azzopardi, Anthony Serracino-Inglott
Department of Pharmacy, Faculty of Medicine and Surgery, University of Malta, Msida, Malta
email: deborah.mangion.10@um.edu.mt

Department of Pharmacy University of Malta

INTRODUCTION

Post-operative pain gives rise to patient discomfort, prolonged recovery, less patient satisfaction and higher health costs thus decreasing the patients' quality of life in the immediate post-operative period. [1]

Pain and discomfort in patients' post-caesarean section (C-section) can be managed via the self administration of intravenous opioids using Patient-Controlled Analgesia (PCA).

AIMS

- To assess pain management in post C-section focusing on PCA in terms of efficacy, safety and cost effectiveness
- To compare nurse documentation using the MOEWS (modified obstetrics early warning system) chart with patient satisfaction

METHOD

The methodology for this study was divided into 3 main phases:

Phase 1– Literature Search

Phase 2– Development of the research tools and psychometric evaluation

Phase 3— Data Collection, analysis and interpretation

Fifty patients were interviewed within 24 hours of having a C-section and data from the patient files was used to complete the audit form.

Twenty six patients were using electronic PCA and 24 patients were using disposable PCA.

Results were generated using SPSS v.22 and then analysed in order to assess patient outcomes and satisfaction with PCA and nurse compliance with the MOEWS chart. Results obtained from the interview were compared with those obtained from the audit.

RESULTS

All patients were satisfied with the pain management received. Twenty two per cent of patients received a PCA information leaflet. Analysis of morphine consumption revealed that 62% of patients used a small dose (<5mg), with the average dose consumed being 7.4mg (out of 50mg) of morphine. Sixteen patients did not use morphine. The most common side-effects reported in the post operative period was pruritus (54%) followed by sedation (36%) while respiratory depression (10%) had the lowest incidence. The mean worst pain score reported by patients on a visual analogue scale was 4.98 (scale 1 to 10, 10 being highest) which was significantly higher than that recorded by the nurses in the MOEWS chart.

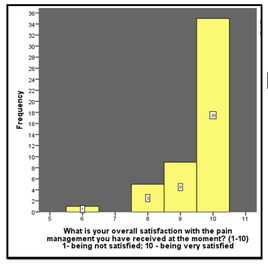

Figure 1: Histogram showing patient satisfaction (n=50)

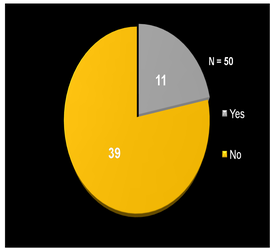

Figure 2: Pie chart showing the number of patients given a PCA leaflet

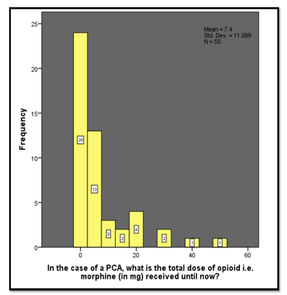

Figure 3: Histogram showing morphine use

CONCLUSION

Although patients appear satisfied with the pain management received, the study reveals that misinformation about PCA may be impacting its proper use and limiting morphine consumption that may explain the mean worst pain scores reported by patients which are higher than perceived and documented by the nurses in the MOEWS chart.

REFERENCES

1. Adeniji AO, Atanda OO. Randomized comparison of effectiveness of unimodal opioid analgesia with multimodal analgesia in post-cesarean section pain management. J Pain Res.2013; 6(28): 419-24 .