(PB4443) PATIENT-CONTROLLED SEDATION USING PROPOFOL DURING BONE MARROW BIOPSY

Topic: 36. Quality of life, ethics, supportive and palliative care

Maria Knutsson*[1], Lisa Gunnar Fahlgren[1], Carina Widmark[1]

[1]*Karolinska University Hospital, HUDDINGE, Sweden;*

Background

Bone marrow sampling constitutes a central component in the diagnosis and follow-up of hematological malignancies. For the majority of patients, the procedure can be performed without major difficulties; however, for some patients, it is experienced as painful and anxiety-inducing. This may lead to increased apprehension prior to future examinations and, in some cases, reluctance to undergo necessary sampling.
To optimize both the patient experience and quality of care, there is a need to identify and implement strategies that reduce discomfort and anxiety in connection with bone marrow sampling. At the same time, such measures should be patient-safe, effective, and resource-sustainable.
Historically, the hematology clinic in Karolinska Huddinge has used oral anxiolytics, such as oxazepam, as well as intravenous sedation with midazolam in conjunction with bone marrow sampling. However, for some patients, these treatment options have been perceived as insufficient in terms of pain and anxiety relief.
In other clinical settings where procedural sedation is applied—such as endoscopic examinations, dental treatments, kidney stone procedures, and bronchoscopies—patient-controlled sedation (PCS) using propofol has been used with favorable results. Studies indicate that PCS may contribute to increased patient satisfaction, partly by allowing patients to regulate the level of sedation themselves and thereby experience greater control over the situation.

Aims

The aim of the project was to introduce patient-controlled sedation with propofol for bone marrow sampling in order to achieve more effective, safe, and patient-centered sedation, as well as to improve patients' experience of the procedure.

Methods

Patient-controlled sedation with propofol was introduced at the hematology outpatient clinic. The staff underwent training in the method, and a drug infusion pump intended for PCS was acquired. Local written protocols were developed to ensure standardized and patient-safe application.
The implementation was carried out gradually through a stepwise transition from intravenous midazolam to PCS with propofol. Over a period of approximately 1.5 years, all patients undergoing bone marrow sampling with PCS were asked to complete an evaluation questionnaire following the procedure.

Results

During the follow-up period, 19 evaluation questionnaires were collected. Patients rated perceived pain, level of sedation, sense of control, occurrence of side effects, and overall satisfaction. They were also given the opportunity to compare the experience with previous bone marrow procedures.
All patients reported being very satisfied with the experience and stated that they had full control over the sedation. The majority assessed that PCS with propofol functioned considerably better compared with previous bone marrow procedures. Most patients reported no side effects. The side effects that did occur were nausea, dizziness, and fatigue, which were consistently described as mild.

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Summary/Conclusion

Patient-controlled sedation with propofol is a patient-safe, effective, and symptom-relieving method for performing bone marrow sampling, particularly in patients with pronounced procedure-related anxiety. The method has improved the patient experience and thereby contributed to increased acceptance of repeated examinations within hematological care.

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