COMPARISON OF THE EFFICACY OF PREGABALIN AND HYDROXYZINE VERSUS PLACEBO AS PREMEDICATION DURING THE INSERTION OF LONG-LASTING INTRAVENOUS DEVICE (LLID)

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INTRODUCTION

The insertion of LLID occurs in a particular emotional context related to the diagnosis of cancer. Therefore, administration of a sedative or anxiolytic drug can be questionable.

Hydroxyzine is one of the reference molecule for premedication because of its anxiolytic and sedative properties. Pregabalin is indicated for the treatment of generalized anxiety disorders and chronic pain.

The main objective of our study was to compare the efficacy of pregabalin and hydroxyzine on the anxiety score given as premedication during the insertion of LLID under local anaesthesia.

MATERIALS AND METHODS

After ethical review board approval and informed written consent, patients requiring a first insertion of LLID were randomized to receive double-blind 150 mg of pregabalin (P group) or 75 mg of hydroxyzine (H group) or placebo (C group) 2 hours before procedure.

Anxiety was evaluated with a visual analogic scale (VAS) (0 (no anxiety) to 100) just before receiving treatment and on arrival at operating room (OR). Pain was evaluated with VAS just after procedure (0 (no pain) to 100). Side effects (drowsiness, drunkenness, dizziness...) were collected on arrival at OR and 48 hours later. The use of rescue analgesic agent was noted during the first 48 hours after the procedure.

Comparisons between the 3 groups were performed with analysis of variance or nonparametric Kruskal-Wallis analysis according

to distribution of data. When overall significant difference was evidenced, post-hoc 2 by 2 comparisons were made with Fisher's Least Significant Difference test.

RESULTS

From May 2011 to December 2014, 300 patients were included and 294 were randomized (98 in P group, 99 in H group and 97 in C group).

Premedicated patients with hydroxyzine had significantly lower VAS-A on arrival at OR than those with pregabalin or placebo (median [interquartile]: 17.0 [5.0-38.0] vs 24.0 [13.0-48.0] or 22.0 [10.0-47.0] with $p=0.041$) (figure). Pain, use of rescue analgesics and side effects were not significantly different among the 3 groups.

Figure Evaluation of anxiety and pain by visual analogic scale (* $p=0.041$)

Pregabalin is not efficient to prevent for anxiety and pain during the insertion of LLID under local anaesthesia.