Letter to the editor: ‘Amiodarone-induced phlebitis: incidence and adherence to a clinical practice guideline’

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Dear editor,

We eagerly read the recent article published in the European Journal of Cardiovascular Nursing entitled Amiodarone-induced phlebitis: incidence and adherence to a clinical practice guideline by Brørs et al.¹ The study determined that 55% of patients suffered from at least one symptom of phlebitis, and the majority of these (87%) occurred from the start of injection up to 24 h. In addition, adherence to the peripheral intravenous catheters (PIVC) recommendations included in the clinical practice guideline was not desirable. This letter suggests some points regarding the methods and analyses of their study.

In the method section of this prospective descriptive observational study, it was only mentioned that patients suffering from arrhythmia were over 18 years of age as inclusion criteria. We admire this action of researchers to evaluate the impact of different variables. Researchers collected demographic and clinical data including age, sex, prescription indication, administration method, amiodarone concentration, treatment unit, injection duration, PIVC site, PIVC size, use of infusion pump and in-line filter, and implementation of glucose flushing. However, it seems that some important variables that directly or indirectly affect the occurrence of phlebitis are left, including body mass index,⁴ vein quality,⁵ nutrition status,⁶ presence of comorbidities,⁷,⁸ and manifestations of psychological disorders such as agitation.⁹

Furthermore, it was not mentioned to control or evaluate important confounders during the venipuncture procedure, such as the person doing the insertion, the antiseptic solution, the frequency of insertion doing the insertion, the antiseptic solution, the frequency of insertion

measurement scales may provide different results. In this regard, the results of a systematic review showed that the use of different evaluation tools to investigate phlebitis brings different incidence rates.⁸ Accordingly, it was expected to use a valid and reliable tool for the diagnosis of amiodarone-induced phlebitis instead of developing a tool. Moreover, the ability to visually diagnose phlebitis is influenced by different individual factors such as knowledge, attitude, motivation, compliance.⁹ In this study, in addition to not calculating the reliability between the observation of trained researcher nurses to evaluate patients’ phlebitis, it is not mentioned whether the examinations were performed simultaneously by two evaluators or not. In such a case, the confidence in the results is reduced, and it is suggested that, despite the lack of consensus on a specific tool,¹⁰ in future studies, one of the valid and reliable tools should be used by at least two simultaneous evaluators.

The researchers reported that there was no significant difference in the relationship between phlebitis and the evaluated variables among patients with or without phlebitis. Although the achievement of these results is valuable, we believe that the authors should have analysed the incidence of phlebitis in the presence of all the discussed variables using multiple regression.

Finally, due to the lack of studies aimed at evaluating the incidence rate of amiodarone-induced phlebitis in the conditions of the implementation of nursing clinical practice guidelines, the study of Brørs et al.¹ is valuable, and we believe that more accurate and more evaluations can help prevent this common complication in the future.

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References


