# Understanding factors that increase the risk of amiodarone-induced phlebitis can guide better practice. In-line filters and nursing guidelines should always be implemented when administering intravenous amiodarone. Increased surveillance is required when higher dosages and concentrations are used" Oragano et al (2019).

Abstract

BACKGROUND: Intravenous amiodarone is the gold-standard treatment for arrhythmias, but phlebitis is a common adverse effect.

OBJECTIVES: To determine the incidence and contributing factors of amiodarone-induced phlebitis and examine phlebitis severity.

METHODS: A systematic review was conducted of articles published before February 2016 in the Cumulative Index to Nursing and Allied Health Literature, Cochrane Library, MEDLINE, Embase, Web of Science, and gray databases (Bielefeld, Lenus, EUGrey, RIAN, and DART). All studies in which amiodarone-induced phlebitis was a primary or secondary outcome were included. Meta-analysis was not appropriate because of study heterogeneity. Studies of the same contributing factors were analyzed together.

RESULTS: In the 20 included studies, phlebitis incidence ranged from 0% to 85%. Increasing the infusion concentration from 1.2 mg/mL to 1.8 mg/mL increased the phlebitis rate ($P < .001$). Total amiodarone doses greater than 1 g resulted in higher phlebitis rates than did doses less than 0.45 mg ($P < .001$). Most infusion durations and rates were not correlated with phlebitis incidence. However, phlebitis incidence was lower with bolus administration than with longer infusions ($P = .002$). The use of in-line filters and nursing guidelines significantly reduced phlebitis rates ($P < .001$) and phlebitis severity. The most common phlebitis severity grades, in descending order, were 0, 1, 2, 3, and 4. CONCLUSIONS: Understanding factors that increase the risk of amiodarone-induced phlebitis can guide better practice. In-line filters and nursing guidelines should always be implemented when administering intravenous amiodarone. Increased surveillance is required when higher dosages and concentrations are used.

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Reference:

Oragano, C.A., Patton, D. and Moore, Z. (2019) Phlebitis in Intravenous Amiodarone Administration: Incidence and Contributing Factors. Critical Care Nurse. 39(1), p.e1-e12.

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