To estimate the prevalence of difficult venous access in complex patients with multimorbidity and to identify associated risk factors” Armenteros-Yeguas et al (2017).

Abstract:

AIMS AND OBJECTIVES: To estimate the prevalence of difficult venous access in complex patients with multimorbidity and to identify associated risk factors.

BACKGROUND: In highly complex patients, factors like ageing, the need for frequent use of irritant medication and multiple venous catheterisations to complete treatment could contribute to exhaustion of venous access.

METHODS: “Highly complex” patients (n = 135) were recruited from March 2013-November 2013. The main study variable was the prevalence of difficult venous access, assessed using one of the following criteria: 1) a history of difficulties obtaining venous access based on more than two attempts to insert an intravenous line 2) no visible or palpable veins. Other
factors potentially associated with the risk of difficult access were also measured (age, gender, and chronic illnesses). Univariate analysis was performed for each potential risk factor. Factors with $p < 0.2$ were then included in multivariable logistic regression analysis. Odds ratios (ORs) were also calculated.

RESULTS: The prevalence of difficult venous access was 59.3 %. The univariate logistic regression analysis indicated that gender, a history of vascular access complications and osteoarticular disease were significantly associated with difficult venous access. The multivariable logistic regression showed that only gender was an independent risk factor and the OR was 2.85.

CONCLUSIONS: The prevalence of difficult venous access is high in this population. Gender (female) is the only independent risk factor associated with this. Previous history of several attempts at catheter insertion is an important criterion in the assessment of difficult venous access.

RELEVANCE TO CLINICAL PRACTICE: The prevalence of difficult venous access in complex patients is 59.3 %. Significant risk factors include being female and a history of complications related to vascular access.

Reference:


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