



The aim of this study was to verify the effect of the time elapsed between the interruption of a continuous intravenous CsA infusion and the collection of blood samples on CsA serum levels” Garbin et al (2017).

Abstract:

BACKGROUND: There are controversies regarding the best way to collect blood samples for cyclosporine A (CsA) serum levels when this immunosuppressant is administered continuously through a silicone central venous catheter (CVC) to hematopoietic stem cell transplant recipients.

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OBJECTIVE: The aim of this study was to verify the effect of the time elapsed between the interruption of a continuous intravenous CsA infusion and the collection of blood samples on CsA serum levels.

METHODS: This randomized 2-group clinical trial involved 32 adults. In group A, blood samples were collected immediately after interrupting the medication from peripheral vein and CVC lines. In group B, the same procedures were performed 5 minutes after interrupting

the infusion.

RESULTS: We did not observe influence of the time elapsed between interruption of the infusion and collection of the samples, independent of the collection mode and the volume discarded ($P > .05$). The line used for the infusion maintained a constant high level when compared with different moments of collection ($P > .05$), whereas in the other lines, there was a significant increase when compared with the levels obtained at 24 hours and 7 days after CsA start ($P = .00$).

CONCLUSION: The CVC line free from cyclosporine can safely be used to collect blood. The procedure can be performed immediately after interrupting the infusion, and discarding 5 mL is sufficient to obtain accurate levels.

IMPLICATIONS FOR PRACTICE: The results can help nurses choose how to collect blood samples through the CVC, thus preventing patients from having a painful and stressful procedure such as peripheral venipuncture.

Reference:

Garbin, L.M., Simões, B.P., Curcioli, A.C.J.V. and de Carvalho, E.C. (2017) Serum Cyclosporine Levels: The Influence of the Time Interval Between Interrupting the Infusion and Obtaining the Samples: A Randomized Clinical Trial. .

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