



It is beneficial to use 1 mg alteplase for occluded CVADs. The cost of waste is nominal compared with the cost savings for the institution” Jafari et al (2018).

Abstract:

Background: Alteplase is a recombinant tissue plasminogen activator that is approved for the treatment of occluded central venous access devices (CVADs) and is commercially available as a 2 mg/2 mL dose. Due to the increasing price of 2 mg/2 mL alteplase vials, our institution switched to using a 1 mg/1 mL dose for certain CVADs. The purpose of this study was to evaluate the use, effectiveness, and cost of a maximum of 2 doses of 1 mg/1 mL alteplase for the restoration of an occluded catheter.

Methods: A report was generated to identify patients who were administered 1 mg alteplase during the period May 2016 through July 2016. A chart review was performed on each patient identified to collect the data needed, such as documentation of a dysfunctional lumen and documentation of patency after alteplase 1 mg was given. To determine the cost of waste, expired 1-mg syringes returned to the pharmacy were collected.

Results: In total, there were 524 1-mg alteplase doses administered during the 3-month time frame. The effectiveness after the first and second dose was 88% and 80%, respectively. Thirty-four doses were wasted, resulting in a cost of around \$2,200. It is estimated that the 1-mg syringes provided the institution with \$136,000 in annualized savings.

Conclusions: It is beneficial to use 1 mg alteplase for occluded CVADs. The cost of waste is nominal compared with the cost savings for the institution. The next step is to analyze other doses of alteplase to find additional areas of cost savings.

Reference:

Jafari, N., Seidl, E. and Dancsecs, K. (2018) Evaluation of Alteplase 1 mg for the Restoration of Occluded Central Venous Access Devices in a Tertiary Care Hospital. The Journal of the Association for Vascular access. 23(1), p.51-55.

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