

“Daptomycin (DPT) is an antibiotic active against Gram-positive bacteria with high bactericidal activity and good biofilm penetration.” Tatarelli et al (2014).

Reference:

Tatarelli, P., Parisini, A., Del Bono, V., Mikulska, M. and Viscoli, C. (2014) Efficacy of daptomycin lock therapy in the treatment of bloodstream infections related to long-term catheter. *Infection*. August 12th. .

Efficacy of daptomycin lock therapy in the treatment of CRBSI [#ivteam](http://ctt.ec/d3U83+@ivteam)

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Abstract:

BACKGROUND: Concomitant systemic and intracatheter antibiotic therapy is a therapeutic option for catheter-related bloodstream infections (CRBSI) in patient fitted with long-term intravenous central catheters. CRBSI are mainly caused by Gram-positive bacteria. Daptomycin (DPT) is an antibiotic active against Gram-positive bacteria with high bactericidal activity and good biofilm penetration.

OBJECTIVE: To study the efficacy of DPT given systemically and as lock therapy in the treatment of CRBSI.

MATERIALS AND METHODS: A retrospective review was conducted of adult patients with a long-term central venous catheter (CVC) receiving both systemic intravenous and intracatheter lock therapy for CRBSI. The primary outcome was catheter maintenance, following clinical success and microbiological eradication.

RESULTS: Eight patients who had failed previous standard therapy (vancomycin 7, cefazolin 1) were included in the study. In all but one, coagulase-negative staphylococci were repeatedly isolated. The other patient had enterococcal infection. DPT, given intravenously and as lock therapy, was successful in six of eight cases. The mean time to negative blood cultures was 2 days (range 1-6). In two cases neither clinical nor microbiological response was documented and the catheter was removed.

DISCUSSION: Systemic and intracatheter therapy with DPT is feasible, carries no toxicity and is apparently effective. DPT might be a suitable therapeutic option in CRBSI to achieve

CVC sterilization and preserve the catheter.

Other intravenous and vascular access resources that may be of interest (External links - IVTEAM has no responsibility for content).

- [Guide for intravenous chemotherapy and associated vascular access devices from Macmillan.](#)
- [CancerUK IV chemotherapy information.](#)

