

"The aim of this retrospective observational study was to evaluate the prevalence of bacterial colonization of CVCs in dogs submitted to hemodialysis treatment at time of CVC removal" Perondi et al (2020).



### Abstract:

Non-permanent central venous catheters (CVCs), are the most commonly used vascular access in veterinary patients undergoing hemodialysis. In human dialysis patients, CVC infection represents a common cause of morbidity and mortality. The aim of this retrospective observational study was to evaluate the prevalence of bacterial colonization of CVCs in dogs submitted to hemodialysis treatment at time of CVC removal. The CVCs of all dogs submitted to hemodialysis (n = 23) at the Veterinary Teaching Hospital "Mario Modenato" of the University of Pisa between January 2015 and December 2016 were considered. For all dogs, data regarding signalment, reason for hemodialysis treatment, duration of catheterization ( $\leq 15$  or  $> 15$  days), CVC complications, and 30-day survival were considered. Statistical analysis was performed using Graph Pad Prism™. Five over 23 dogs (22%) showed positive bacterial culture of CVC (+), and 18/23 dogs (78%) negative culture of CVC (-). The most prevalent microorganism was Staphylococcus Spp (3/5; 60%). No significant difference was found in the prevalence of CVC infection according to age, gender, reason for hemodialysis, CVC complications, duration of catheterization, and outcome. No statistically significant difference ( $p = 0.64$ ) in survival curves was reported at log rank analysis between dogs with CVC - and CVC +. The prevalence of bacterial CVC contamination in our dialysis dogs showed relatively low. Exclusive use of CVC for hemodialysis, good hygiene practice during CVC management, and use of chlorhexidine as an antiseptic should

be strongly encouraged.

Outcomes of femoral and jugular tunneled hemodialysis catheters

Staphylococcus aureus colonization in hemodialysis patients

Central venous catheters for chronic hemodialysis

[Full Text](#)

**Reference:**

Perondi, F., Petrescu, V.F., Fratini, F., Brovida, C., Porciello, F., Ceccherini, G. and Lippi, I. (2020) Bacterial colonization of non-permanent central venous catheters in hemodialysis dogs. *Heliyon*. 6(1), p.e03224. doi: 10.1016/j.heliyon.2020.e03224. eCollection.

**I enjoyed reading...** Bacterial colonization of non-permanent central venous catheters in hemodialysis dogs

Share Tweet