



#IVTEAM #Intravenous literature: Miller, L.M., Vercaigne, L.M., Moist, L., Lok, C.E., Tangri, N., Komenda, P., Rigatto, C., Mojica, J. and Sood, M.M. (2014) The association between geographic proximity to a dialysis facility and use of dialysis catheters. *BMC Nephrology*. 15(1), p.40.

Abstract:

BACKGROUND: Residing remotely from health care resources appears to impact quality of care delivery. It remains unclear if there are differences in vascular access based on distance of one's residence to dialysis centre at time of dialysis initiation, and whether region or duration of pre-dialysis care are important effect modifiers.

METHODS: We studied the association of distance from a patients' residence to the nearest dialysis centre and central venous catheter (CVC) use in an observational study of 26,449 incident adult dialysis patients registered in the Canadian Organ Replacement Registry between 2000-2009. Multivariate logistic regression was used to assess the association between distance in tertiles and CVC use, adjusted for patient demographics and comorbidities. Geographic region and duration of pre-dialysis care were examined as potential effect modifiers.

RESULTS: Eighty percent of patients commenced dialysis with a CVC. Incident CVC use was highest among those living > 20 km from the dialysis centre (OR 1.29 (1.24-1.34)) compared to those living < 5 km from centre. The length of pre-dialysis care and geographic region

were significant effect modifiers; among patients residing in the furthest tertile (>20 km) from the nearest dialysis centre, incident CVC use was more common with shorter length of pre-dialysis care (< 1 year) and residence in central regions of the country.

CONCLUSION: Residing further from a dialysis centre is associated with increased CVC use, an effect modified by shorter pre-dialysis care and the geographic region of the country. Efforts to reduce geographical disparities in pre dialysis care may decrease CVC use.

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.

