

FIRST QATAR ALLERGY CONFERENCE

Contact dermatitis in hemodialysis patients at Al Wakra hospital

Ihab Elmadhoun¹, Saad Mahi^{2,*}, Rony Pulikkan¹, Ahmed Emam¹

Address for Correspondence:

Saad Mahi²

¹Department of Nephrology, Al Wakra Hospital, Hamad Medical Corporation, Doha, Qatar

²Department of Internal Medicine, Al Wakra Hospital, Hamad Medical Corporation, Doha, Qatar Email: smahi@hamad.ga

http://doi.org/10.5339/qmj.2022.fqac.18

© 2022 Elmadhoun, Mahi, Pulikkan, Emam, licensee HBKU Press. This is an open access article distributed under the terms of the Creative Commons Attribution license CC BY 4.0, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

Cite this article as: Elmadhoun I, Mahi S, Pulikkan R, Emam A. Contact dermatitis in hemodialysis patients at Al Wakra hospital, Qatar Medical Journal 2022(2):18 http://doi.org/10.5339/qmj.2022.fqac.18



ABSTRACT

Background: Patients undergoing hemodialysis are exposed to various potential allergens from medication, dialysis catheters, topical antiseptics, and different adhesive dressings. Many patients develop a local allergic reaction and get itchy rashes, which may get infected, leading to significant morbidity and preventable health cost. In this study, we aimed to report the incidence of contact dermatitis (CD) and its potential complications in hemodialysis (HD) patients at the Al Wakra Hospital Dialysis unit.

Methods: We performed a retrospective chart review of documented local allergic reactions at vascular access sites for the HD patients at the Al Wakra Hospital.

Results: Currently, 102 patients are getting maintenance HD through catheters or arteriovenous (AV) fistula. Twelve (14.4%) patients developed CD (7 [58%] had cuffed jugular dialysis catheter, and 5 [42%] had an AV fistula). Most patients (75%) developed CD in the early period of dialysis initiation, and 25% developed it later in the course. Most patients responded to removing adhesive plasters and dressing the vascular access site using gauze only and topical steroids (hydrocortisone 1% cream/mometasone 0.1% cream). Two (16.6%) of the 12 patients developed vascular access site infection, of whom 1 had an AV fistula and developed a severe rash with cellulitis leading to sepsis and 2 admissions, although blood cultures remained negative. The patient responded to IV antibiotics and local mometasone 0.1% cream. Complete removal of all adhesive tapes helped prevent recurrence of the rash. Later, dressing of the AV fistula site was performed only with a cotton gauze. The second patient had a jugular catheter and developed an allergic rash leading to cellulitis and tunnel infection. Swab culture showed





Figure 1.

Staphylococcus aureus from the exit site sensitive to cloxacillin/cefazolin. The patient improved after local and oral antibiotics and removal of adhesive tapes. The catheter was not removed, and the patient did well.

Conclusion: The incidence of CD at our dialysis unit is 14.4%. Previously published reports from other dialysis units showed a lower incidence of 1.25%.

Early identification and diagnosis of allergic rash at the vascular access site and avoidance of adhesive plasters and other potential allergens prevent complications like infection and loss of precious vascular accesses in these patients.

Keywords: Allergens, CD, HD patients

REFERENCES

1. Gonzalo MA, Revenga F, Caravaca F, Pizarro JL. Epidemiologic study of contact dermatitis in hemodialysis patients. J Investig Allergol Clin Immunol. 1997 Jan-Feb;7(1):20 - 3.