



Urinary tract-related bloodstream infection (BSI) is associated with substantial morbidity, mortality, and financial costs. We examined the role of red blood cell (RBC) transfusions on developing this condition among US Veterans” Greene et al (2018).

Reference:

Background: Urinary tract-related bloodstream infection (BSI) is associated with substantial morbidity, mortality, and financial costs. We examined the role of red blood cell (RBC) transfusions on developing this condition among US Veterans.

Methods: We conducted a matched case-control study among adult inpatients admitted to 4 Veterans Affairs hospitals. Cases were patients with a positive urine culture result obtained 48 hours or longer after admission and a blood culture obtained within 14 days of the urine culture, which grew the same organism. Controls included patients with a positive urine culture result who were at risk for but did not develop BSI (control group 1) and patients without a positive urine culture result who were present in the facility at the time of case diagnosis (control group 2).

Results: Compared with the findings in control group 1, receipt of RBCs was not significantly associated with urinary tract-related BSI (odds ratio, 1.03; 95% confidence interval, 1.00-1.07; $P = .07$). However, we found increased odds of urinary tract-related BSI compared with the results in patients without infection (control group 2) (odds ratio, 1.11; 95%

confidence interval, 1.06-1.17; $P < .001$). Conclusions: Given the heightened risk of urinary tract-related BSI associated with receiving a greater number of RBC transfusions, adhering to recommendations to transfuse the minimum amount of blood products necessary may minimize the risk of this infection among Veterans.

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Greene, M.T., Saint, S., Ratz, D., Kuhn, L., Davis, J., Patel, P.K. and Rogers, M.A.M. (2018) Role of transfusions in the development of hospital-acquired urinary tract-related bloodstream infection among United States Veterans. *American Journal of Infection Control*. November 20th. .

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