

KSN 2016 Abstract Submission

Dialysis

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Afebrile adult chronic hemodialysis (CHD) patients with bacteremia are associated with higher in-hospital mortality

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Background: Infection is the second frequent cause of mortality in CHD patients. Questions concerning fever's risk-benefit quotient have generated considerable controversy. There is a paucity of data regarding the presence of fever as a prognostic indicator in CHD patients with bacteremia. The purpose of the study is to compare in-hospital mortality between febrile and afebrile CHD patients with bacteremia.

Methods: We conducted a retrospective study during 2006~2014. The patients on immunosuppressive or anti-cancer drugs or in whom blood culture was performed after 24 hours after admission were excluded. The search yielded 190 bacteremic events were noted in 162 CHD patients. The 162 events in 134 patients who had fever were classified as "febrile group" and the other 28 events in 28 patients as "afebrile group". Fever was defined as oral BT>37.7°C or tympanic BT>37.5°C. The laboratory data were considered only for the day and vital signs at the time of positive blood culture was taken.

Results: Mean age and history of stroke was higher in the afebrile group. There were no between-group differences in gender, BMI, cause of ESRD, duration of CHD, co-morbidity and usual medications. Reason for admission and reason for blood culture were different between the two groups. Fever was the main reason for admission (67.9%) and blood culture (79.0%) in the febrile group. Interval between admission and blood culture was longer in the afebrile group (P<0.001). Serum albumin was lower in the febrile group (P= 0.021). There were no between-group differences in vital parameters and SIRS except BT. Number of SIRS criteria was higher in the febrile group (P=0.010). Severity were not different. In-hospital mortality was higher in the afebrile group compared with the febrile group (42.9% vs 6.2%, P<0.001). ICU or in-hospital length of stay were not different.

Conclusion: Afebrile CHD patients with bacteremia are associated with higher in-hospital mortality. Higher age and lower serum albumin in the afebrile group suggests that decreased immunity is associated with higher mortality. Longer interval between admission and blood culture suggests that delayed diagnosis is associated with higher mortality in the afebrile group

Keywords: Bacteremia, Fever, Hemodialysis, Mortality, CRP