

New-onset atrial fibrillation is associated with 28-day mortality among patients with sepsis

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However, adult patients with suspected infection can be identified as being more likely to have poor outcomes typical of sepsis if they have at least two qSOFA criteria. We have analyzed the occurrence of NO-AF on admission and 28-day mortality among infected patients with two or more qSOFA criteria on admission.

Methods: A prospective cohort study of infected patients aged 18 years or older admitted to the emergency department (ED) of Slagelse Hospital during 01.10.2017 – 31.03.2018 (171 days). The population in the area was 198.000. All patients with suspected or documented infection on arrival, and treated with antibiotics, were included. NO-AF was defined as episodes of atrial fibrillation (AF) within 4

Background: New-onset atrial fibrillation (NO-AF) has been associated with adverse outcomes in sepsis. The definition of sepsis is based on organ dysfunction by use of the Sequential Organ Failure Assessment (SOFA) score.

hours from admission documented on a 12-lead electrocardiogram and without a history of prior AF. We used a logistic regression analysis to adjust for the potential confounding of the association between NO-AF and 28-day mortality. Survival status was obtained from the Danish Civil Registration System.

Results: A total of 2.168 infected patients with median age of 73.1 years were included, and 181 (8.3%; 95% CI 4.7-13.3) fulfilled at least two qSOFA criteria on admission. The incidence of sepsis based on qSOFA criteria was estimated to 194/100,000. A total of 15 (8.3%, 95% CI 4.7-13.3) qSOFA patients developed NO-AF. The 28-day mortality among all qSOFA patients was 17.1% (95% CI 11.9-23.4), 40.0% (95% CI 16.3-67.7) among patients with NO-AF and 15.1% (95% CI 10.0-21.4) among patients without NO-AF. Unadjusted odds ratio for 28-day mortality among NO-AF patients was 3.8 (95% CI 1.2-11.50) and 4.6 (95% CI 1.4-15.3) after adjustment for several potential confounders.

Conclusion: New-onset atrial fibrillation is independently associated with 28-day mortality among patients with qSOFA defined sepsis.