INFECTIOUS ENDOCARDITIS AND SOCIOECONOMIC STATUS

Poster Contributions
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Background: Infectious Endocarditis (IE) is frequently encountered in patients with chronic diseases as well as drug abuse, which could lead to the assumption that these patients in general have a lower socioeconomic status (SES). We therefore examined if IE patients are characterized by lower SES compared to the general population and patients with acute myocardial infarction (MI).

Population and Methods: From 2002 to 2010, data was prospectively collected from consecutive IE patients at two tertiary cardiac centers in Copenhagen. By combining nationwide administrative registers patients with IE (cases) were matched on sex and age with cohorts from the background population and patients diagnosed with primary MI, respectively. SES, defined as the average yearly household income 5 years before hospitalization, was divided into five groups. Conditional logistic regression analysis was used to estimate the association between SES and IE.

Results: A total of 626 patients with IE were included in the present study. Mean age of the cases were 65 (SD=13.9) and 71.9% were males. Cases were matched with 9054 controls (MI=2964, general population= 6090). IE patients had a significantly higher annual income (US$ 58.239 [SD=46.313]) compared to the general population (US$ 48.912 [SD=25.338]) (p<0.0001), and patients diagnosed with MI (US$ 50.853 [SD=34.988]) (p<0.0001). The conditional logistic regression analysis demonstrated increased odds for IE with increasing income compared to MI controls [odds ratio (OR) 1.26; 95% confidence interval (CI) 1.15-1.37 per 18.850 US$ increment in household income (p<0.0001)]. An analysis according to bacterial etiology, demonstrated a significant association between high SES and IE for patients infected with Streptococcus (n=1049, p<0.0001) and ‘Other microorganism’ (n=517, p<0.0001). In patients infected with Staphylococcus aureus (n=133), Coagulase negative Staphylococcus (n=60) and Enterococcus (n=102), no significant correlation was demonstrated between SES and the risk of IE (p=0.50).

Conclusion: In Denmark, IE is generally associated with higher SES compared to patients with MI and to the general population, respectively.