

P1995 Prognosis of severe infectious endocarditis, impact of preoperative neurological complications and evaluation of surgical tolerance: retrospective multicentre study

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Background: Neurological complications during severe infectious endocarditis (IE) interfere with surgeon's decisions and IE prognosis, by increasing the risk of cerebral haemorrhage during extracorporeal circulation. The objective of the study is to determine the factors associated with the IE 1 year survival.

Materials/methods: Observational, multicenter, retrospective cohort study performed in 7 French University Hospitals from 2010 to 2016. Were included patients admitted in cardiac or medical ICU, with a severe (SOFA score ≥ 3) left-sided IE (defined by modified Duke criteria), complicated by at least one neurological event (MRI or CT-scan diagnosis), and who had a surgical indication. Factors associated with the risk of 1 year mortality were assessed by uni and multivariate analysis.

Results: Among the 196 included patients, 163 (83%) experienced a stroke, 62 (32%) a cerebral haemorrhage, 29 (15%) a mycotic aneurysm, 20 (10%) a meningitis or brain abscess. 138 (70 %) underwent valvular surgery (22 emergency, 81 urgent, 22 elective and 13 unknown, the main indication was heart failure, n = 72), with a mortality rate of 32 % (44/138) compared with 84 % (49/58) without surgery (OR 0.09, 95%CI 0.04-0.19, p < 0.0001). In multivariate analysis, 1 year mortality independent risk factors were cardiac surgery (ORa 0.15, 95%CI 0.05-0.42, p 0.0003), and chronic renal insufficiency (ORa 3.65, 95%CI 1.52-8.74, p 0.004). In a subgroup of patients undergoing surgery (n = 43), 88% did not present neurological worsening.

Conclusions: Cardiac surgery and chronic renal insufficiency are associated with the 1 year prognosis of severe IE with neurological complications. A future propensity-matched cohort study could reduce confusion bias due to influence of neurological complications on surgeon's decisions and should result in a better evaluation of the benefit-risk balance of surgery in these patients.