Non-Invasive Therapy for Device Infection Might Increase Device Related Infectious Endocarditis

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We investigated the influence on device infection by non-invasive therapy using antibiotics without lead extraction. Fifty-two patients were performed lead extraction due to systemic or focal device infection in our hospital from Dec. 2009 to May 2011. Mean age was 70.4 and mean lead age was 3630 days. Male gender were 57.2%. The interval from last procedure before device infection to extraction was 842 days and the interval from device infection to extraction was 367 days. Non-invasive therapy using antibiotics more than one month before lead extraction were 55.8%. Before lead extraction, febrile were 21.4%, leukocytosis including neutrocytosis were 32%. Lead related vegetation which were observed during lead extraction procedure were 35.6%. The vegetation were more frequent in the patients by non-invasive therapy : 47.8% vs 22.7%; \( p = 0.062 \). And the longer interval before lead extraction correlated device endocarditis: 686 days vs 215 days; \( p = 0.176 \). As for pocket infection, the longer interval before device extraction by non-invasive therapy significantly influenced on device related vegetation: 1151 days vs 217 days; \( p = 0.046 \). In conclusion, early intervention for device infection by lead extraction might prevent from device related endocarditis.

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