EXTERNALIZATION OF CONDUCTOR CABLES IN QUICKSITE AND QUICKFLEX LEFT VENTRICULAR LEADS

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Background: We intended to evaluate the incidence of electrical and mechanical failure of QuickSite (QS) and QuickFlex (QF) left ventricular (LV) leads which are a part of a lead advisory.

Methods: We invited all 154 alive patients who had the QS and QF leads implanted at our center to participate in this prospective study. High resolution fluoroscopy was performed in multiple views to look for conductor externalization. Patients also underwent device interrogation looking at the LV lead parameters in different configurations. Lead structure was graded as 0 (normal), 1 (abnormal but no externalization) and 2 (complete externalization). Mechanical failure was defined as Grade 1 or 2.

Results: We report the analysis of the first 70 patients (Models 1056 =4, 1058 =7; 1156 =22 and 1158 =37) who completed the evaluation. Mean age was 68 ±12years with 86% males. Mean age of the lead was 68 ±12months. On fluoroscopy grade 0, 1, and 2 were seen in 45 (63%), 14 (20%) and 11 (16%) respectively. QuickFlex leads (Models 1156 and 1158) were more likely to have complete externalization than the QuickSite leads (19% vs 0%; p = 0.12). There was no impact of patient age, lead age or other patient or lead characteristics on the likelihood of having mechanical failure. 5 (7%) patients had an electrical abnormality during follow-up. None of the patients with a mechanical failure had an electrical abnormality.

Conclusion: QS and QF LV leads have at a high risk for mechanical failure with no evidence of electrical failure.