Recommendations of the Working Group of Arrhythmias of the German Society of Cardiology on the approach to patients with Riata® and Riata ST® leads (St. Jude Medical). Nucleus of the Working Group of Arrhythmias of the German Society of Cardiology.

Abstract:

Riata® and Riata ST® implantable cardioverter defibrillator (ICD) leads (St. Jude Medical, Sylmar, CA) show an increased incidence of insulation defects, particularly "inside-out" lead fracture where inner, separately insulated cables penetrate through the surrounding silicone of the lead body. The exact incidence of Riata® lead problems is not clear and seems to range between 2-4% per year in the first 5 years after implantation according to new registry data. We recommend beyond a detailed information the following care of patients with Riata® and Riata ST® leads: 1) Activation of automatic ICD alerts, 2) remote monitoring with automatic daily alerts whenever possible, 3) monthly ICD controls in patients at high risk (pacemaker dependency, history of ventricular tachyarrhythmias) and high or moderate lead-related risk (8F, 7F single coil), 3-monthly controls in moderate patient and lead-related risk, 3 to 6-monthly controls in low patient and lead-related risk (no bradycardia, no history of ventricular tachyarrhythmia). Every ICD control should include meticulous analysis of oversensing artifacts in stored electrograms (EGMs) of sustained and non-sustained ventricular
tachyarrhythmias and registration of EGMs during provocation testing (pectoral muscle activity, arm movements). If electrical abnormalities are observed, reoperation with addition of a new ICD lead is recommended; lead extraction only if indicated according to current guidelines. Fluoroscopy should only be performed if electrical abnormalities are found by an experienced electrophysiologist and a high frame rate and resolution. Management of fluoroscopic abnormalities in the absence of electrical abnormalities is not clear. Therefore, routine fluoroscopy of patients with Riata® leads without electrical abnormalities is not recommended.