Abstract 0030 – Figure: Arrhythmia

Contributions of remote monitoring to the follow-up of implantable loop recorders: a dual center experience

Peggy Jacon (1), Aurelien Miralles (2), Alix Martin (1), Natacha Pellet (1), Hager Rekik (1), Pascal Defaye (1)
(1) CHU Grenoble, Cardiologie, La Tronche, France – (2) CH Valence, Cardiologie, Valence, France

Purpose: Remote monitoring (RM) is accepted as a reliable option to standard follow-up (sFU) for ICD, but little is known about its additional value for implantable loop recorders (ILR).

Methods: We analyzed clinical outcomes and device-related data of 69 patients (pts) with ILR followed in two centers. Pts were implanted with Medtronic Reveal XT and provided with Carelink. FU started after hospital discharge. Manual RM transmissions (RMt) were performed every 2 weeks, or in case of symptoms, with at least one sFU/year. In emergency cases, pts were invited for in-hospital visits.

Results: We enrolled 69 pts (42% male, 64±14 years old). 90% were implanted for syncope or lipothymia. 26% suffered of a cardiopathy, and 42% presented an abnormal EKG. During 14±9 months, we noted 22±19 RMt and 2±1 sFU visit per patient. 67 had symptoms RMt (5±6 per patient) and 67,65 and 66 pts experienced ≥3, ≥13, ≥32, ≥144 RMt episodes classified as VT, bradycardia and asystole. Within the 54 pts with RMt judged as reliable by the physician, rate of episodes was respectively 5±7, 2±3, 10±16 and 47±83 for symptoms, VT, bradycardia and asystole. For 15 pts, ILR data were judged as not reliable (oversensing 20%, undersensing 47%, inability to RMt 33%). It led to 9772±15105 episodes per patient, mostly due to R wave undersensing. 27 pts experienced significant symptoms, and RMt led to cardiac diagnosis in 14 pts (11 pacemaker implantations). 13 pts experienced syncope without significant abnormality on RMt, leading to a diagnosis of non-cardiac disease. Rate of diagnosis (cardiac and non-cardiac) was 41% in the reliable group, and 47% in « non-reliable » group mostly due to symptoms acquired with RMt.

Conclusion: In a dual center observational study, RM can be an effective method of FU for ILR recipients and evaluated to reduce unnecessary sFU.

Non-contrast cardiac resynchronization therapy implantation is feasible in case of renal insufficiency

Sok-Sithikun Bun (1), Decebal Gabriel Latcu (2), Anis Ayari (2), Abdelkarim Errahmouni (1), Nadir Saoudi (2)
(1) CH Princesse Grace, Cardiologie, Monaco, Monaco – (2) CH Princesse Grace, Cardiologie, Monaco, Monaco

Background: Renal insufficiency (RI) is frequent in patients eligible for cardiac resynchronization therapy (CRT) and may be worsened by the use of contrast agents.

Objective: We sought to determine the feasibility of CRT implantation without contrast injection in patients with contraindication to iodine.

Methods: Patients eligible for CRT and presenting with RI were prospectively included (non-contrast NC group). A contemporary control group (CG) of CRT patients with contrast injection was used for comparison. An over-the-wire coronary sinus (CS) lead with angled distal tip was selected for this “blind harpooning” technique. A lateral branch was targeted at first intention in a left anterior oblique fluoroscopic view. In case of failure, a contrast injection was then allowed if no lateral branch was found with the « blind » strategy.