**Pacing & Electrophysiology**

**Effect of vacuum suction drainage system placement on clinical outcomes during routine permanent pacemaker implantation**

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**Background:** Achieving adequate hemostasis in blind pacemaker pocket is difficult. Pacemaker site hematoma with its attendant complications is a frequent occurrence (17-25%) after permanent pacemaker Implantation (PPI) especially in patients of ischemic and valvular heart disease on anticoagulation and antiplatelet therapy.

**Methods:** 84 patients requiring PPI were included in present study. 61 (72%) Patients were male, 23 (27%) patients were females. Clinical presentation was syncope in 35 (41%) patients, complete heart block in 46 (54%), Symptomatic sinus & Functional Bradiyrdia in 10 cases (5%). 27 (32%) patients had coronary artery disease and were on dual antiplatelets therapy with Ecosprin and Clopidogrel /Prasugrel. Two (2.4%) patients of rheumatic heart disease were on Acitrom. 89% patient received single chamber and 11% patient received dual chamber pacemakers. Permanent Pacemaker was implanted in routine manner in right infracavicular fossa. As a part of protocol MINI VAC closed wound suction drainage system was placed into pacemaker pocket through separate dependent portion of pacemaker site. Injection Targocid, Piptaz were used for two days in therapeutic dosage as per hospital protocol. Patients were discharged after 48 hours after removal of vacuum suction drainage system and wound dressing. Patients were followed for period of three months on regular basis.

**Results:** There was no incidence of pacemaker site hematoma, local pain or tenderness, infection during hospital stay in all 84 patients. Neither these end points were observed during follow-up period of three months.

**Conclusion:** Permanent pacemaker hematoma can be avoided with routine use of vacuum suction drainage system placement during permanent pacemaker implantation. There is no risk of pacemaker pocket infection requiring repeated hospital admissions and risk of explantation.

**3D CARTO guided VT ablation in post MI patients – A single centre experience**

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**Background:** Radiofrequency ablation (RFA) for VT is an established therapy in patients with ICD to reduce the number of shocks. As many of our patients could not afford ICD, we offered RFA as a primary therapy to these patients. We present our experience of VT ablation in Indian population.

**Methods:** Patients who underwent RFA for VT ablation in our centre from January 2008 to May 2013 formed the study group. Patients were categorized as Group I (with ICD) and Group II (without ICD). Time-to-event analysis was performed. The primary end-points studied were VT recurrence and all-cause mortality.

**Results:** Of 48 patients who underwent procedure, 17 were in Group I and 31 in Group II.

Median time-interval between ICD implantation and RFA in Group I was 3yrs (Range: 1-12years). One hundred thirty nine morphologically distinct ventricular tachycardias were induced in the lab with an average of 2.6 VTs per patient. Hemodynamically unstable or nonsustained VTs were 55% and hemodynamically stable and sustained were 45%. Freedom from recurrence of VT was observed in 77% with complete procedural success and 53% of patients with partial success or procedure failure ($p = 0.22$). The freedom from recurrent VTs was 45% ($N = 9$) in Group I and 86% ($N = 3$) in Group II ($p = 0.0034$) (Fig.1). Two patients had procedure failure. All cause mortality was 4% ($N = 2$). There were no arrhythmic deaths.

**Conclusion:** VT ablation is a safe procedure and can be considered as a primary therapy in patients who cannot afford an ICD. In patients with ICD, early preventive VT ablation at the time of ICD implantation may be better than later curative therapy for recurrent shocks.

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**The Indian Society of Electrocardiology and the Indian Heart Rhythm Society device survey**

Indian Society of Electrocardiology & Indian Heart Rhythm Society, India

**Background:** There is no data on indications, clinical characteristics of patients and type of cardiac implantable electrical devices (CIED), including pacemakers, intracardiac defibrillators (ICD) and cardiac resynchronization therapy (CRT) in India.

**Aim:** The CIED survey was conducted to document the type of devices used, indications and capture demographic characteristics, clinical status and co-morbidities of patients undergoing these implants in India.