Three Year Experience in New Electrophysiology Laboratory at North Okkalapa General Hospital, Myanmar

Soe Thu Zar Win
Myint Soe Win
Myo Han
Kyi May Htoo
Poe Kyi Thar Myint Lwin

Introduction: The most common problem in cardiology practice is arrhythmia and precise timed management is important. The involvement of electrophysiology and pacing service is essential in hospital setting and require expertise decision and harmonized team management. By analysing the electrophysiology and pacing procedures regarding patients’ profile, indications, types of interventions, success rate and complications, it is aimed to upgrade the laboratory and human resources for performing more successful complex procedures.

Methods: All the data regarding the procedures in electrophysiology and pacing laboratory in North Okkalapa General Hospital were retrospectively analysed. Data were collected from 2016 January to 2018 December. The demographic profile and procedural data were investigated.

Result: A total of 957 patients; 967 procedures; 581 electrophysiology procedures; 386 device implantation including new implant as well as re-do cases, lead repositioning and pulse generator change. In electrophysiology procedure, 14 were diagnostic and 567 were therapeutic. Among therapeutic ablation procedures, 551 patients (97.2%) of the ablation procedures were successful and 16 patients (6.3%) were failed. Most SVT were AVNRT; 310 patients had successful slow pathway modification, only 4 patient were unsuccessful and one patient was complicated by AV block. Among 140 patients of Left sided accessory pathway, only 2 patient were failed to ablate and one of the patient was complicated by pericardial effusion. Eighty six patients of Right sided accessory pathway were successful but 3 patients were failed to ablate. A total of 7 Fascicular VT, 3 Atrial Tachycardia, 7 RVOT PVC were successfully ablated without recurrence and 2 AT, 2 Fascicular VT and 3 RVOT PVC were failed to ablate. Regarding device procedure, 338 single chamber pacemaker, 17 dual chamber pacemaker, 7 ICD, 6 CRTD and 4 CRTP were newly implanted. Lead repositioning was done for 7 pacemaker, 4 CRT and one ICD. Pulse generator change was done for two single chamber pacemaker. Only two pacemaker patient were complicated by pocket infection. Two of the patient had pneumothorax but spontaneously resolved. Most of the candidates for electrophysiology study and ablation procedure had no cardiovascular risk factor but the candidates for pacemaker implantation had one or more risk factor. Every year, international expert electrophysiologists were invited and performed some difficult ablation procedures and CRT implantation.

Conclusion: Performance in our newly established EP lab is quite stable for most simple procedures. It is very hopeful and quite challenging to be able to handle more complex cases in the future year. Harmonized team work, well trained enthusiastic allied professionals and fellows, experienced international expertise and not all but at least financial support is very important.