CRYOABLATION FOR PARAHISSIAN ACCESORY PATHWAYS

Ertuğrul I, Karagöz T, Yıldırım İ, Özer S Hacettepe Medical Faculty, Pediatric Cardiology Department Ankara, Turkey

Introduction: Cryomapping and cryoablation is preferred for parahisian accessory pathways since close ralationship to his bundle. We report 20 patients with Wolff Parkinson White syndrome who underwent cryoablation of the parahissian accessory pathways.

Methods and Results: From September 2010 - December 2011, 20 patients between 8-31 ages underwent cryoablation. Body weigths were above 25 kg. All of the patients' accesory pathway was determined during electrophisiologic study (EPS) as parahissian. Cryoablation performed in -80° degree for 4-5 minutes on avarge 4 episodes. Radiofrequency (RF) catheter ablation used in six patients who had multiple accessory pathways. Cryoablation performed on places where tachycardia stoped during cryomapping, preecitation dissappeared by catheter pressure or cryomapping. In all patients except one acute success achieved and determined by unable to provocate tachycardia and disapperance of preexitation. In one patient temprorary complete AV block observed during 3rd minute of cryoablation, two patient developed right bundle branch block. Avarge procedure time 144 minutes, flouroscopy time was 36 minutes. After avarage seven mounths follow up, jthere were two recurrences. In one of these patients transeosofageal EPS performed but, tachycardia couldn't be induced.

Conclusion: Cryoablation can be used safely in pediatric patients whose accessory pathway close to the conduction system. Complication develops rarely compared to the RFA. Complete AV block can be observed but it is temporary. Although recurrency is reported higher compared to RFA, the present study represents an acceptable recurrence rate.

Key words: cryoablation, Wolff Parkinson White, parahissian