Kateterska ablacija supraventrikulske tahikardije u bolesnika s transplantiranim srcem

Catheter ablation of supraventricular tachycardia in a patient with heart transplant

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Uvod: Klinički značajne supraventrikulske tahikardije (SVT) mogu se javiti nakon transplantacije srca te postoje izvještaji o uspješnoj kateterskoj ablaciji u ovih bolesnika. Do sada su opisani pojedinačni slučajevi invazivnog liječenja undulacije atrijske, akcesornih puteva i atrioventrikularne nodalne kružne tahikardije (AVNRT) u bolesnika s transplantiranim srcem^{1,2}.

Prikaz slučaja: Prije 2 godine, bolesniku u dobi od 50 godina učinjena je transplantacija srca biatrijskom tehnikom zbog terminalne dilatacijske kardiomiopatije. Rani postoperativni tijek bio je kompliciran perzistentnom supraventrikulskom tahikardijom frekvencije 150/min koja je protumačena kao undulacija atrijske. Tada je ehokardiografski opisana reducirana sistolička funkcija presadka s ejekcijskom frakcijom lijeve klijetke od 40%. Učinjenom obradom isključeno je stanično i humoralno odbacivanje, a koronarografski nalaz bio je uredan. Nakon medikamentozne konverzije u sinusni ritam dolazi do postupne normalizacije funkcije lijeve klijetke. Tahikardiomiopatija uslijed SVT postavljena je kao moguća etiologija snižene funkcije transplantata. Tijekom recentne hospitalizacije verificirani su ponovo dugi paroksizmi SVT (150/min). Aritmija je prekidana primjenom adenoza, a uvidom u telemetrijske zapise tahikardija započinje dugim PR intervalom nakon čega nestaju p valovi, a javlja se pseudoR u V1 odvodu. Unatoč terapiji propafenonom i bisoprololom tahikardija je recidivirala više puta dnevno i trajala po više sati. Učinjena je standardna elektrofiziološka studija s tri katetera te je verificirana tipična AVNRT koja je u nastavku sanirana radiofrekventnom modifikacijom sporog puta na tipičnom anatomskom mjestu. Činjenica da se radio o srčanom transplantatu nije imala većeg utjecaja na katetersku ablaciju te je zahvat prošao bez komplikacija, a aritmija više nije recidivirala.

Zaključak: Supraventrikulska tahikardija može komplicirati postoperativni tijek nakon transplantacije srca te biti čak i uzrok disfunkcije presadka. Kateterska ablacija kurativna je metoda i u ove skupine bolesnika, a prema našem saznanju do sada još nije opisana u Republici Hrvatskoj.

Introduction: Clinically significant supraventricular tachycardia (SVT) may occur after a heart transplant, and there are reports of successful catheter ablation in these patients. Individual cases of typical flutter, accessory pathways and atrioventricular nodal reentrant tachycardia (AVNRT) ablation are described in patients with transplanted heart^{1,2}.

Case report: Two years ago, 50-years-old patient underwent a heart transplant (biatrial technique) due to terminal dilated cardiomyopathy. The early postoperative course was complicated by persistent supraventricular tachycardia with the heart rate of 150/min, which was interpreted as an atrial flutter. Echocardiography described reduced systolic function of the graft with LVEF of 40%. Cellular and humoral rejection were ruled out and coronarography was normal. After drug-conversion to sinus rhythm left ventricular function gradually normalized. Tachycardiomyopathy due to SVT was set as the possible etiology of reduced graft function. During a recent hospital stay, long bursts of SVT were recognized. Arrhythmia was interrupted by adenosine, and telemetry recordings revealed that tachycardia began with a long PR interval after which P waves disappeared and pseudoR pattern appeared in lead V1. Despite the antiarrhythmic therapy with propafenone and bisoprolol tachycardia recurred several times a day and lasted for several hours. We performed a standard electrophysiology study with 3 catheters and typical AVNRT was diagnosed. Radiofrequency ablation of the slow pathway was performed at a typical anatomical site. The fact that it was a heart transplant had no greater impact on catheter ablation. Procedure was performed without complications and arrhythmia did not reoccur.

Conclusion: Supraventricular tachycardia may complicate the postoperative course after a successful heart transplant, and even be the cause of graft dysfunction. Catheter ablation is an effective in this group of patients, and to our knowledge has not yet been described in the Republic of Croatia.

LITERATURE

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