

2D i 3D ehokardiografija u procjeni volumena lijevog atrija u bolesnika s fibrilacijom atrija liječenih izolacijom plućnih vena

Two and three-dimensional echocardiographic assessment of left atrial size in patients with atrial fibrillation treated with pulmonary vein isolation

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Rezultati dosadašnjih studija ukazuju na činjenicu da veličina lijevog atrija (LA) izravno korelira s incidencijom fibrilacije atrija (FA). Bolesnici kod kojih je prisutna dilatacija LA u vrijeme provođenja postupka izolacije plućnih vena imaju povišen rizik recidiva i stoga je točna procjena veličine LA od presudne važnosti prilikom izbora bolesnika kod kojih se planira ovakav tip liječenja.

U zadnje vrijeme prednost u ocjeni veličine LA daje se procjeni volumena koja se može mjeriti standardnom (dvodimenzijom) i naprednom (trodimenzijom) ehokardiografijom, kompjutoriziranom tomografijom i magnetskom rezonancijom. S obzirom na raširenu uporabu u svakodnevnoj kliničkoj praksi, a uzimajući u obzir visoku incidenciju FA u općoj populaciji, ehokardiografija se nameće kao metoda izbora u ocjeni volumena LA. Razvoj naprednih ehokardiografskih tehnologija kao što je trodimenzijom ehokardiografija omogućio je dodatni uvid u anatomiju i funkciju LA. Studije ukazuju da volumeni LA mjereni trodimenzijom ehokardiografijom dobro koreliraju s onima mjenjenima magnetskom rezonancom. S druge strane, čini se da konvencionalna, dvodimenzijom ehokardiografija podcjenjuje volumen LA, a samim time i rizik recidiva bolesnika liječenih izolacijom plućnih vena.¹

U ovom prospektivnom pilot istraživanju uključeno je 20 bolesnika s FA kod kojih je učinjen prvi postupak izolacije plućnih vena i uspoređene vrijednosti volumena LA dobivene konvencionalnom dvodimenzijom i naprednom trodimenzijom ehokardiografijom.

The results of recent studies indicate that the size of the left atrium (LA) directly correlates with the incidence of atrial fibrillation (AF). Patients who present with dilation of the LA at the time of the pulmonary veins isolation have an increased risk of AF recurrence and therefore an accurate assessment of LA size is of crucial importance in the selection of patients in whom this procedure is planned.

Estimating LA volume provides more accurate measure of LA size which can be measured by a standard (two dimensional) and advanced (three-dimensional) echocardiography, computerized tomography and magnetic resonance. Given the widespread use in everyday clinical practice, and taking into account the high incidence of AF in the general population, echocardiography is emerging as the method of choice in the evaluation of the volume of the LA. The development of advanced echocardiographic technologies such as three-dimensional echocardiography has enabled additional insight into the anatomy and function of the LA. Studies indicate that the LA volumes measured by three-dimensional echocardiography correlate well with those measured by magnetic resonance imaging. On the other hand, it seems that conventional, two-dimensional echocardiography underestimates the volume of the LA and thus the risk of recurrence of patients treated with pulmonary veins isolation.¹

In this prospective pilot study we included 20 patients with AF scheduled to pulmonary veins isolation and compared the value of the LA volumes obtained by conventional two dimensional and advanced three-dimensional echocardiography.

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LITERATURE

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