USEFULNESS AND ROLE OF ECHOCARDIOGRAPHY IN NON VALVULAR ATRIAL FIBRILLATION

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ECG is mandatory in assessing non valvular atrial fibrillation (NVAFs). It helps in stratifying the Annual Thromboembolic Risk (ATR) and the risk of reappearing arrhythmias and in putting indication to cardioversion (CV). We conducted a retrospective analysis on 140 ER pts developing FANV for the first time. All pts were evaluated through transthoracic (ETT) and, when indicated, Transesophageal (ETE) echocardiography. ATR Incidence was then deduced from ECG findings. NVAFs showing normal ECO values were related to a low ATR (1.5%). ATR is correlated to cardiac cavities dimensions: enlarged left atrium (AS) and left ventricle telediastolic diameter (VS) show a significantly increased ATR (AS<2,5 cm/m2=ATR 3%;AS>2,5 cm/m2= ATR 9%; VS<2,6 cm/m2=ATR 3.1%; VS>2,6 cm/m2=ATR 8.9%). Also mitral anulus calcification (ATR 5.1%) and left ventricle segmentary kinetic alterations induce a higher thromboembolic risk (2 segments alteration ATR 10.5%; 3 segments ATR 13.2%; >3 segments ATR 16.1%). Left atrium dilatation concomitant with global ventricular disfunction determines an additive risk (ATR 22%). Atrial and ventricular enlargement has a negative correlation with successful CV and is related to reappearing NVAFs (35% in 29%) high risk pts (ETT findings of ATR ≥5% and arrhythmia occurred more than 48 hours before), we performed ETE: 20 pts (50%), 72 hrs after atrial fibrillation occurrence, developed thrombi in left atrium. ETE finding of spontaneous contrastographic effect in left atrium is correlated to ATR 3.5-4.2%. reduced auricula flow (AU<20 cm/sec) develops ATR 2.5%. Pts free from atrialauricular thrombi underwent successful CV without anticoagulants complications. Pts positive for atrial thromb underwent successful CV only after a 4 weeks anticoagulant treatment and negative ETE follow-up (evidence of no more thrombi). ECO assessment is suggested in evaluating ATR in NVAF pts. We also suggest: A) ETT and ETE to be performed before CV in high risk FANV pts; B) effective and prolonged anticoagulant therapy in high risk pts; C) ETE 1 month follow-up in thrombocol patients undergoing anticoagulant treatment; D) ETE monitoring (before and after CV) in case of rapid CV and/or absolute contraindications to anticoagulant therapy.

LONG TERM FOLLOW UP IN "ABLATED AND PACED" PATIENTS

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In patients (pts) with atrial fibrillation (AF) resistant to common antiarrhythmic regimens, alternative options could be taken into account. In a special subset of pts, ablate and pace procedure is a feasible even if non curing strategy to control the ventricular rate and symptoms. Although this procedure has been on many criticisms, it’s quite accepted from physicians as an ultimate tool to control heart rate in very symptomatic pts. The aim of this paper is to evaluate the clinical impact of this procedure in the complex management of AF in the complex management of a Cardiology Department. From June 1992 to June 2000, 2312 pts were observed as they referred symptoms related to AF. Thirty six pts (55%) were selected for the ablation procedure of the AV node to manage recurrent episode of AF. The mean age was 68 years (range 55-72 years); the underlying heart disease was hypertensive in 3 pts (31.6%), coronary heart disease in 3 pts (8.4%), valvar in 8 pts (22.2%), 12 pts (33.3%) had no structural heart disease. Every pts underwent 2D color Doppler echocardiography: the mean ejection fraction was 0.38 +/- 0.18. Twenty two pts demonstrated mitral valve regurgitation (MVR); ECO was evaluated by semiquantitative method, of mean degree 2.5 (range 1-3); Every pts underwent ablation of AV node by radiofrequency catheter energy to achieve complete AV block and pacemaker implantation: DDD/R in 36 pts and VVI/R in 6 pts. Pts fulfilled a simple questionnaire to answer on a scale from 1 to 10,0 the whole well being and the arrhythmic symptoms. All pts were followed in the outpatient pacemaker recipients ambulatory for a mean period of 36 months (range 4-96 months): none pt demonstrate worsening of istolic ventricular function. The mean degree of mitral valve regurgitation decreased to 1.6 (range 1-3) (p=0.002). All pts but 2 referred, after a short period of stabilization, an improvement of general and tachyarrhythmic symptoms. We conclude that ablate and pace procedure is a safe and relatively simple procedure to manage the symptoms in a very selected subset of pts. The improvement of symptoms seems to be related to significant improvement of the degree of MVR. Even if this procedure is palliative it’s able to improve the quality of life of these pts and represent an effective tool in the hybrid management of AF.

EFFICACY AND EFFECTS OF INTRAVENOUS D-SOTALOL IN PATIENTS WITH ATRIAL FLUTTER

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The role of antiarrhythmic drug therapy continues to undergo major changes. The efficacy and benefit of D-sotalol therapy in atrial flutter was considered aiming as well the suppression of paroxysmal episodes and the prevention of their recurrences and the control of the ventricular rhythm in chronic cases. D-sotalol is a major antiarrhythmic agent that combines potent class III action with nonselective beta-block properties.

We evaluated efficacy and effects of D-sotalol in 20 patients with atrial flutter that received one intravenous injection of 1.5 mg / Kg of this drug. The conversion to sinus rhythm was obtained in 60 % of cases (12 pts). While in 20 % (4 pts) obtained conversion in atrial fibrillation and in 20 % (4 pts) nothing conversion but a reduction of ventricular rate.

As adverse effect was recorded: hypotension (10%), torsade de point and 1 congestive hearth failure.

In conclusion intravenous D-sotalol appears an interesting alternative in the treatment of atrial flutter.