PROPAFENONE COMPARED WITH AMIODARONE FOR CONVERSION OF PAROXYSMAL ATRIAL FIBRILLATION TO SINUS RHYTHM

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The effectiveness of propafenone versus amiodarone was compared for conversion of paroxysmal atrial fibrillation to sinus rhythm in an open parallel group study.

Forty consecutive adult patients with atrial fibrillation less than 7 days' duration, without clinical evidence of heart failure, were randomized to treatment with propafenone (group 1,n=20) or amiodarone (group 2, n=20). There was no difference in left atrial size (echo-determined) between the two groups. Intravenous propafenone was given as a 2 mg/kg bolus over 10 min followed by a 10 mg/kg infusion for 24 hours. Amiodarone was given as a 5 mg/kg intravenous bolus over 10 min followed by a 15 mg/kg infusion for 24 hours.

Two patients in each group converted spontaneously before treatment. In the remaining patients, sinus rhythm was restored within 24 hours in 16 patients of group 1 (89%) and 14 patients of group 2 (78%). The median time to conversion was 1.7 hours in group 1 and 10 hours in group 2 (p less than 0.05). No serious adverse effects were noted in either group.

In conclusion, propafenone was as effective and safe as amiodarone and it acted significantly faster in promoting conversion of paroxysmal atrial fibrillation to sinus rhythm.

DEVELOPMENT OF TOLERANCE TO PRAZOSIN IN CHRONIC HEART FAILURE:DOBUTAMINE UNMASKING ALTERATION OF ALPHA-1-ADRENOCEPTOR ACTIVITY

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The hemodynamic effects of acute and chronic treatment with different vasodilators(VD)were assessed in patients with chronic heart failure of NYHA-class III-IV.Out of 24 patients 6 were randomly allocated to either Nitrate (NI), Di-Hydralazine(HY),Captopril(CA)or Prazosin(PRA)respectively.In addition,we studied the hemodynamic response to Dobutamine(DOB)by using increasing infusion rates of 2.5, 5.0 and 10.0 ug/kg/min at the start and at the end of a 3-months period of chronic therapy with either VD.Basically, DOB caused a dose dependant increase of cardiac index(CI) and a fall of mean pulmonary artery pressure(PAP) at the start of VD treatment and maintained the effects during a 3 months period of chronic treatment with NI,HY and CA respectively.However,after 3 months therapy with 6mg/day PRA the PAP was elevated above control and DOB caused a further increase of PAP,thus reversing the initial effects. DOB-induced elevation of CI remained virtually unchanged.

Prazosin:		control	DOB-infusion rates (ug/kg/min) 2.5	5.0	10.0
CI	S	2.44±0.06	2.91±0.13	3.06±0.14	3.65±0.14
	E	2.72±0.20	3.36±0.31	3.81±0.38	4.41±0.40
PAP	S	26.2±3.8	21.3±1.8	20.3±1.0	20.3±1.7
	E	29.3±5.6	32.8±5.8	32.5±5.8	37.5±8.5

CI(l/min/kg),PAP(mmHG),S(Start),E(End)of 3 months therapy

Conclusions: The reversal of the effects on PAP after a 3-months treatment with PRA may be-atleast in part - due to up-regulation of alpha-1-adrenoceptors.This seems to be unmasked by the alpha-1-adrenoceptor agonist of the (-)-enantiomer of the racemic mixture of (+/-) DOB.

SUBTHERAPEUTIC DIGITALIZATION IS FREQUENT & MAY BLUNT ITS IMPACT IN PATIENTS WITH SEVERE CHRONIC HEART FAILURE

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While controversy regarding the efficacy and even safety of digoxin (D) in chronic congestive heart failure persists, guidelines for its safe and effective use are known. To examine the current clinical use of D, we retrospectively examined 326 adult patients referred for cardiac transplantation with ischemic or non-ischemic dilated cardiomyopathy, LVEF <40% (84% with LVEF <25%). D was being used by 236/326 pts (72%) with a mean dose of 0.23 mg/day.

	D	no D	
n	236	90	
LVEF (mean %)	17.5	19.7	
Cardiac Index(mean)	2.5	2.5	
PCWP(mean)	22.5	21.1	
Age (mean)	48.6	50.4	
Ischemic etiology	53%	67%	p<0.001

Trough levels of D were obtained in 138/236 pts(58%) with a mean of 1.0 ng/ml (range 0-3.7 ng/ml). In these pts, 38% had a level < 0.8 ng/ml, while 54% had levels between 0.8 & 1.8 ng/ml. Levels >1.8 ng/ml were seen in 8% of pts.

We conclude that while there is no apparent selection by ventricular function for pts given D, it is inadequately prescribed or monitored in nearly 1/2 of those pts with severe left ventricular dysfunction most likely to benefit. The optimal clinical effect of digitalis, as well as potential adverse consequences, have probably been underestimated & must be weighed in its clinical use as well as in future studies of its safety and efficacy.

EFFECT OF INTRACORONARY ERGONOVINE ON THE CONTRALATERAL CORONARY ARTERY IN MAN

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Intracoronary ergonovine administration has been suggested as a selective method for provocation of coronary artery spasm. In order to determine whether intracoronary ergonovine is selective without affecting the contralateral coronary artery, 10 patients were studied using serial quantitative angiography (videodensitometry). Ergonovine was administered into either the right (N=5) or left (N=5) coronary artery using cumulative doses of 10, 35, and 60 µg. Overall, ergonovine produced a dose dependent vasoconstriction in all coronary segments when administered directly into an artery. No changes in heart rate or aortic pressure were observed. When the contralateral coronary artery was examined, significant vasoconstriction was seen in the proximal portion of the artery while no changes were observed in more distal segments. The magnitude of the response seen in the proximal segment of the contralateral coronary artery was similar to or greater than that observed with direct injection of ergonovine into that artery.