with IVA or atenolol consistent with a reduction in heart rate (Figure 1). There were no changes in the corrected QTc interval throughout the follow-up period.

Conclusion: The effects of IVA and atenolol on the QT interval is solely related to bradycardia with no evidence of any direct effect on repolarisation. The QTcP correction formula allows accurate QTc interval assessment.

Figure 1. QT and QTc changes vs baseline.

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Neurally induced atrial arrhythmias are eliminated by alpha-adrenergic blockade
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Purpose: to determine 1) whether the neurally induced atrial arrhythmias can be modified by alpha-adrenergic receptor blockade and, if so, 2) the role that intrinsic cardiac ganglia play in such anti-arrhythmic therapy.

Methods: In 8 anesthetized dogs, trains of 5 electrical stimuli (100 mA; 1 ms) were delivered immediately after the P wave of the ECG to mediatinal nerves associated with the extrapericardial and intrapericardial superior vena cava. Regional atrial electrical activities were monitored with IVA or atenolol consistent with a reduction in heart rate (Figure 1). There were no changes in the corrected QTc interval throughout the follow-up period.

Results: T97C: this previously described polymorphism, causing a P33S substitution, was found to be unequally distributed between cases and controls. Among the 158 AF patients 24 were carrying the T allele: 11 homozygous and 12 heterozygous individuals carrying the T allele: 5 homozygous and 11 hemizygous men. Thus 24 T-alleles of a total of 208 alleles were found (p = 0.01). OR for having AF given a T-allele was thus 0.52 (95% CI: 0.28 - 0.96).

C193T: one patient presented a C193T mutation causing a L65F substitution.

Conclusions: T97C: This polymorphism and its distribution between cases and controls supports the idea that disturbances in the repolarisation and especially of the IKs and IKr currents are of importance to the pathogenesis of AF. Moreover KCNE5 is an X-linked gene and therefore women have a higher chance of carrying the protective C-allele than men. This might be part of the explanation why AF more often is seen in men than in women.

C193T: This hitherto undescribed change affects a highly conserved region of the KCNE5 protein. Changing the L-residue at position 65 to an F is likely to shift the function of the protein towards a more KCNE3-like one. The KCNQ1/KCNE5 complex then will form a constitutively open channel resulting in a faster repolarisation rendering the myocardium more vulnerable to tachyarrhythmias.