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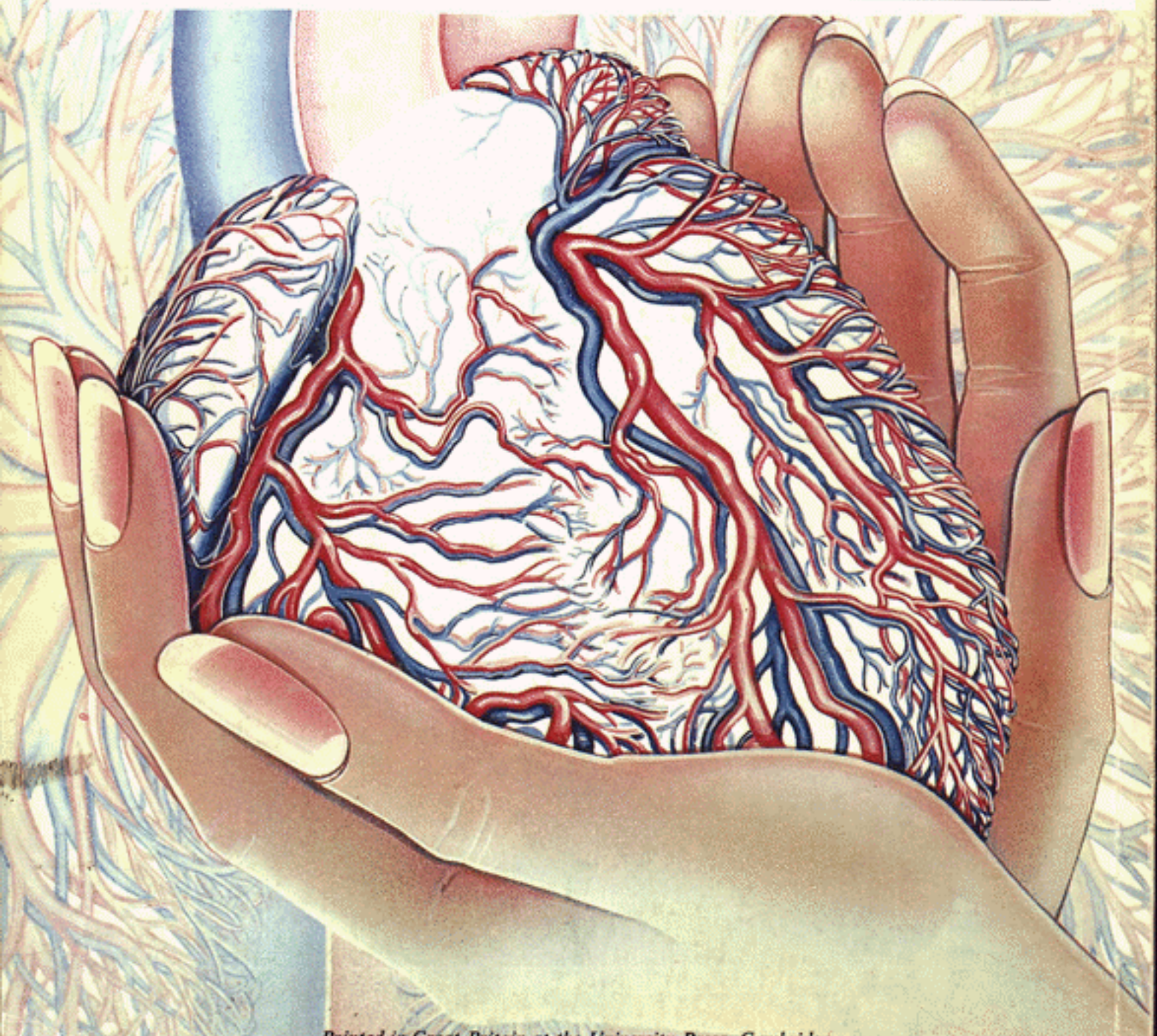

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DISPERSION OF ATRIAL REFRACTORINESS AND ATROPINE IN MAN.

A.Michelucci,L.Padeletti,G.A.Fradella,D.Monizzi F.Fantini.
Cardiology Unit,University of Florence,Italy.

To evaluate the influence of atropine(A)on atrial refractoriness(R)and its dispersion(D), we studied 10 subjects with sinus bradycardia but otherwise healthy.Effective and functional refractory periods were measured at 3 sites of the right atrium(high,middle and low in the lateral wall)in sinus rhythm and during atrial pacing(120/min),before and after A(0.04 mg/Kg i.v.).Twice threshold stimuli were applied at each site by a separate pair of electrodes which was not removed until the end of the study.D was determined,before and after A,as the longest minus the shortest refractory period. Statistical analysis(paired t-test)indicated that A was able to reduce significantly R at each site and D both in sinus rhythm and at equivalent driven cycle lenght.The effects that we attribute to A should be borne in mind considering that: a)vagus exerts a non uniform influence on atrial refractoriness; b)A has been proven to prevent or abolish atrial fibril lation induced by the stimulation of carotid sinus in man; c)a prolonged and non uniform atrial refractoriness have been reported as additional features of patients with sinus node dysfunction and supraventricular arrhythmias.