were removed for determination of radioactive content.

The results of the experiments showed that the labelled platelets appeared only in the sponge exudates to a minor degree but that they preferentially accumulated in the vascular bed around the implanted sponges and in the other areas of skin examined. It is suggested that if platelets have a role in the early phases of the development of inflammatory reactions then this is intravascular rather than extravascular.

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Estimation of plasma nicotine by combined capillary column gas chromatography–mass spectrometry

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A quantitative method for the determination of nicotine by combined capillary column gas chromatography–mass spectrometry has been developed. The initial extraction of nicotine, from plasma, used a modification of the method of Feyerabend, Levitt & Russell (1975). This modification allowed the addition of the quinoline internal standard direct to the plasma, prior to extraction.

The nicotine was finally extracted into benzene and injected (0.8 µl) into a gas chromatograph fitted with a 20 m (0.3 mm internal diameter) glass capillary column coated with SP1000. The initial column temperature was 140°C and this was increased at 6°C/min to a final temperature of 180°C.

A V.G. Micromass 12B2 mass spectrometer was directly coupled via a 0.15 mm internal diameter glass capillary restriction to the gas chromatograph. The mass spectrometer operating conditions were: interface 250°C, ion source 200°C, ionizing potential 70 eV, accelerating voltage 4 KV, and source pressure 10^{-5} mmHg.

The most abundant ion in the nicotine spectrum (mass to charge ratio (m/e) 84) and the molecular ion of quinoline (m/e 129) were measured by selective ion monitoring. The accelerating voltage was switched between 2.6 and 4 kV to bring these ions into focus.

The ratio of the m/e 84 and m/e 129 peak heights was linearly related to nicotine concentration over the range 5–100 ng nicotine/ml plasma.

This method has been applied to the study of the pharmacokinetics of nicotine in man and experimental animals.

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