Peripheral blood scintillometry appears to have important advantages compared with venous occlusion plethysmography:

(a) Observations can be made nearly continuously, the summated 5 s count being sufficiently high for statistical purposes with a 200 $\mu$Ci dose of $^{113m}$indium.

(b) The peripheral part, for example the forearm, is in an undisturbed state.

(c) Venous occlusion, with or without arterial occlusion of the wrist is unnecessary, since the count-rate levels produced, for example, by stressful mental arithmetic and reflecting vasodilatation within the forearm (Abramson & Ferris, 1940) are typically more than ten standard deviations above the mean resting level.

(d) The method is insensitive to blood velocity changes but purely reflects the degree of vasodilatation/vasoconstriction within the peripheral part.

(e) The system-response speed is fast and allows a close analysis of the profile of the vascular response as it actually occurs in the undisturbed state.

(f) Information is obtained on the latency and duration of the muscle vasodilatation so that spontaneous fluctuations and habituation phenomena can be recorded as well as clear resting levels.

(g) A 200 $\mu$Ci dose of $^{113m}$indium is considered small enough to allow repeat studies and its half life (100 min) allows recordings over a considerable length of time.

The method is being developed for psychophysiological research and has been used in pharmacological studies.

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**Can meaningful dose-response curves be obtained by measuring the firing-rate responses of cells to iontophoretically applied substances?** (T)

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**Pharmacology of the autonomic nervous system—a new film** (T)

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