such as these are generally considered undesirable because of the resulting limited resolution. Additional specificity is added by the solvent extraction step and by the color reaction. The chloroform extract of blank plasma in the method described gave only one blue coloring spot which moved with the solvent front. The addition of serotonin to the plasma did not interfere with the tryptamine analysis.

The use of thin layer chromatography for quantitative measurement has several advantages, when applicable. It would permit simplification of the preliminary extraction procedures, and although the sensitivity and accuracy of the method is comparable with that of fluorescence assay methods, it requires much less in the way of instrumentation. Although we have worked with only a few compounds, using only Kieselguhr and a number of solvents, there is no reason to believe that methods cannot be devised for many compounds.

Résumé. Les auteurs décrivent une technique microchromatographique d'adsorption sur couches minces de Kieselguhr, avec l'acétone comme éluant, dans laquelle le déplacement de la part de tryptamine est proportionnel à la quantité de ce corps dans le domaine compris entre 0,025 et 2,0 μg. On peut ainsi déterminer 0,10 μg de tryptamine par ml de plasma. Il est fort probable que cette méthode simple et quantitative pourra également être adaptée à de nombreux autres composés.

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An Experimental Method for Compressing the Sciatic Nerve

It has recently been recognized that certain nerve lesions are due to constriction or moderate compression and that symptoms from such lesions can be relieved by simple surgical measures[1–4]. The very simplicity and success of these operations have prevented study of the changes in the affected nerves. However, in animals the effects of continued constriction or moderate compression have been studied by Weiss[5–6], and Denny-Brown[7]. The methods used by these workers were imperfect, and a fresh study of this problem was therefore carried out.

Method. Under ether anaesthesia the right sciatic nerve in a rat was exposed in the thigh and an 8 mm length of No. 2 Sterivac (polythene) tubing slit longitudinally was then slipped over the nerve. The bore of this tubing (0.5 mm) was just small enough to constrict the nerve. This tubing was held in place by two 3 mm pieces of No. 3 Sterivac tubing also slit longitudinally to allow them to be applied over the narrower tubing. The internal diameter of the No. 3 tubing (1 mm) was the same as the external diameter of the No. 2 tubing.

Results. In a preliminary study 12 rats were used. In some animals immediately following the operation the foot was a little weak; however, all the rats were using the hind limbs normally when they were sacrificed three to six weeks later. Under urethane anaesthesia both sciatic nerves were exposed, a stimulating electrode was applied to the nerve opposite the ischio-coccygeus muscle (i.e. proximal to the constricting device on the right), and a recording electrode inserted into the muscles of the foot.

The oscillograph record from the foot showed a delay in conduction amounting to 2–4 msec on the constricted as compared with the normal side; in four animals repetitive firing occurred following a single shock.

Discussion. Simpson[8] regarded the delay in conduction and the repetitive firing as the characteristic electrical features of carpal tunnel compression and related syndromes. These electrical changes were produced in rats by the method of constriction described above and presumably the pathological changes in the sciatic nerve of the rat should be similar to those occurring in constricted or moderately compressed nerves of man. These changes are being studied and will be reported later[9].

Zusammenfassung. Ein leichter Druck wurde auf den Nervus ischiadicus der Ratte ausgeübt. Die electromyographischen Veränderungen sind den Veränderungen in pathologisch umklammerten menschlichen Nerven ähnlich. Die pathologische Anatomie dieser Nerven wird jetzt untersucht.

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STUDIORUM PROGRESSUS

Zur Ermittlung der Farben grösster Buntkraft

Einleitung[1–3]. Die *Buntkraft* erscheint in einer Reihe von Farben gleichen Buntton[4] als eine unmittelbar auffallende und wichtige Eigenschaft, so dass auch ungeübte und mit Farbmessungen nicht vertraute Personen ohne Schwierigkeit aus solchen Reihen die nach ihrer Ansicht buntkräftigste Farbe auszusuchen vermögen. Da sich

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[4] Da zwischen bunten und unbunten Farben zu unterscheiden ist und nur die bunten in ihrem Ton differieren, so verwenden wir hier durchwegs den Ausdruck «Buntton» statt «Farbton» und dementsprechend «Buntkraft» statt «Farbkraft».