

Summary. Detailed studies were made of the chemical nature of carbon-14 activity found in acid-soluble nucleotide, ribonucleic acid, and deoxyribonucleic acid fractions isolated from kidney or liver tissue of rats rendered experimentally nephrotic with a series of 10 small daily injections of aminonucleoside-8-C¹⁴, and, in similar fractions obtained from rats sacrificed as early as 3 hours after administration of a single large dose of the labeled compound. No significant differences were noted. Only the adenosine and guanosine phosphates of the acid-soluble nucleotide fractions and the adenine and guanine bases of RNA and DNA hydrolysates were labeled with carbon-14. No evidence was obtained either for conversion of the intact aminonucleoside to the corresponding nucleotide or for incorporation of the 6-dimethylamino- or 6-methylamino-purine moieties into ribonucleic acid or deoxyribonucleic acid of kidney or liver tissue.

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Effect of Adrenal Tissue on Desoxycorticosterone Hypertension.* (27012)

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Swingle and coworkers, comparing 7 adrenalectomized and 4 intact dogs, noted that a given amount of desoxycorticosterone produced a lesser degree of hypertension in the intact dogs(1). Soffer also found it difficult to produce hypertension with desoxycorticosterone in patients with intact adrenals, even though it occurred readily in patients with adrenal insufficiency(2). In this study we wanted to find out whether the presence or absence of adrenal tissue has any effect on development of desoxycorticosterone hypertension in the rat. We carried out our study on 2 groups of rats, producing hypertension by administering a given amount of desoxycorticosterone to both groups. In one group both adrenals had been removed; in the other group, both adrenals were intact.

Methods. Forty male Wistar rats, of approxi-

mately 100 g, were each injected subcutaneously with 31 mg of desoxycorticosterone trimethylacetate. Four weeks later the same dose was repeated. Half of these rats were given bilateral adrenalectomies; the other half received sham operations with adrenal tissue left intact. All 40 were allowed to drink only .5% saline and were fed only Purina lab chow.

Between the sixth and seventh week after original injection, 3 blood pressure readings, at 2-day intervals, were taken on each rat, using the microphonic method(3). The average of these was considered the "true" blood pressure.

Results. Blood pressures were obtained on 18 rats in the adrenalectomized group and on 15 in the group receiving sham operations. The mean blood pressure of the adrenalectomized group was found to be 174 mm Hg. (S.D. ± 9); that of the group whose adrenals were left intact was 178 mm Hg. (S.D. ± 19). The

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difference between the 2 groups was not statistically significant ($p = .5$). Both groups were quite hypertensive, since normal male Wistar rats of the same age have an average blood pressure of approximately 105 mm Hg.

Conclusions. These results indicate that in rats under these conditions, presence or absence of adrenal tissue has no effect on the severity of hypertension produced by desoxycorticosterone administration.

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Hemadsorption in Monkey Kidney Cell Cultures of Mycoplasma (PPLO) Recovered from Rats.* (27013)

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The hemadsorption test for viral agents in cell cultures has been widely utilized(1). This report presents evidence that a PPLO isolated from the respiratory tract of laboratory rats causes hemadsorption and cytopathic changes (CPE) in monkey kidney cell (MKC) cultures. The isolations were made during etiological investigation of chronic respiratory disease (CRD) in these animals(2).

Materials and Methods. *Preparation of rat specimens.* Three 2-3 month old Sprague-Dawley rats exhibiting signs of CRD were furnished by Dr. Benjamin N. Berg(3). Gross examination revealed abnormal amounts of upper airway secretion and pulmonary consolidations. Lung and tracheal tissues were ground in diluting fluid consisting of Hanks' balanced salt solution (BSS) containing 0.5% lactalbumin hydrolysate (LAH), penicillin, streptomycin and mycostatin. Supernatant fluids were collected after centrifugation and inoculated directly into cultures or stored at -60°C . Air-

way washings were inoculated immediately.

Cell cultures. Primary rhesus MKC cultures were initially nourished with BSS containing 0.5% LAH and 2-10% calf serum. Prior to use, cultures were refed with Eagle's basal medium (4) prepared with BSS. Penicillin, streptomycin and mycostatin were added to both media. Incubation was at $36-37^{\circ}\text{C}$.

Assay and detection in MKC cultures. Serial 10-fold dilutions of material to be tested were prepared in diluting fluid. Four cultures were inoculated with 0.1 ml of each dilution. Cultures were observed for CPE and were tested usually after 4 to 5 days for hemadsorption of guinea pig erythrocytes according to the technic of Vogel and Shelokov(1) as modified by Chanock *et al*(5). Titers were calculated by the Reed-Muench method and expressed as the log TCD₅₀/0.1 ml of inoculum.

PPLO broth and agar cultures. Test material was inoculated into Bacto-PPLO broth(6). After 2-4 days aliquots were sub-inoculated in broth or spread over the surface of Bacto-PPLO agar(6). Both broth and agar contained 3% PPLO serum fraction(7), penicillin and streptomycin. Incubation was at $36-37^{\circ}\text{C}$. Agar plates were observed microscopically for typical PPLO colonies, recognition of which was periodically verified by the stained agar technic of Dienes(8). No bacterial growth

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