

TABLE II. Intraperitoneal Titration of MEF₁ Virus in Mice 6 Days of Age.

Virus dilution	Mortality ratio of mice			Total % mortality
	Exp. 1*	Exp. 2†	Total	
10 ⁻¹	11/12	20/30	31/42	74
10 ⁻²	2/12	0/6	2/18	11
10 ⁻³	1/12	—	1/12	8.3
10 ⁻⁴	2/12	—	2/12	16.7

* Intracerebral titer in 3-4-week-old mice: 10^{-4.4}; suckling mouse passages 54, 56, 60, pooled. Intraper. inoculum: .05 ml.

† Intracerebral titer in 3-4-week-old mice: 10^{-3.5}; suckling mouse passage 59. Intraper. inoculum: .1 ml.

by the intracerebral route of inoculation. The CFW strain of Swiss mice was employed. Mice of various ages (suckling and weaned) were inoculated intraperitoneally with 0.05 or 0.1 ml of a 10% suspension of virus, and were observed for paralysis and death over a 21-day period. Considerable variability in the susceptibility of individual litters was noted in the first experiment; this was partially controlled in later ones by pooling all the suckling mice used in a given experiment and redistributing them at random to the mothers.

Results. Table I presents the results of

5 experiments testing the susceptibility of mice of various ages to intraperitoneal inoculation. Although mice 1 to 3 days old were comparatively resistant the fatality rate in animals from 4 to 14 days of age inclusive varied from 50 to 75%. Beyond the age of 15 days susceptibility fell off again. The majority of deaths occurred between the 4th and 10th days after inoculation, regardless of the age of the mouse.

In Table II are presented the results of 2 titrations carried out by the intraperitoneal route. Only scattered irregular deaths occurred in mice inoculated with dilutions higher than 10⁻¹.

Summary. Suckling mice 4-15 days old inclusive are susceptible (50-75% mortality) to the intraperitoneal inoculation of a 10% brain-cord suspension of the suckling mouse adapted MEF₁ strain of poliomyelitis virus. Considerable variation in the susceptibility of individual mice of a given age was observed. The possible usefulness of this technic in passive protection studies employing gamma globulin or other agents is pointed out.

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Effect of Anti-histaminics on Experimental Nephritis in Rabbits. (19052)

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Acute nephritis may be produced in rabbits by the injection of duck serum containing antibodies against rabbit kidney. This reaction was first studied by Masugi(1,2). The exact mechanism is not clear. The antibodies of the anti-rabbit-kidney serum (NTS) are fixed promptly in the kidneys(3), nephritis

developing after a latent period of 6-8 days. Kay(4,5) demonstrated that the onset of nephritis was coincident with the appearance of antibodies against duck serum.

Reubi(6,7) has reported the successful modification or prevention of this pathological change by the administration of anti-histaminics.

Methods. Dutch type, 1-2 kg rabbits and

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white domestic ducks were used. Ducks were injected twice a week for 10 weeks with 5 ml of a 10% suspension of homogenized rabbit kidney. Pooled sera had a precipitin titer of 1/16 against rabbit kidney.

Fourteen rabbits received 6.6 ml of NTS I.V., 7 were treated with N.N. dimethyl N benzyl N. (alpha pyridyl) ethylene diamine (Pyribenzamine) and 7 served as controls. Five rabbits received 6.6 ml normal duck serum. The treated group received 15 mg/kg Pyribenzamine subcutaneously every 6 hours for 4 days, followed by 10 mg/kg every 4 hours until they were killed 14 days after the initial injection.

A second series of 28 rabbits received 5 ml of NTS. Fourteen received 0.8 mg Pyribenzamine subcutaneously every 3 hours starting 2 hours before the injection of NTS. They were sacrificed at the end of 8 days.

Urine was collected and examined for protein and formed elements each day. Terminally, the kidneys were examined histologically.

Results. Heavy albuminuria, hematuria, cylindruria appeared in all rabbits receiving NTS. The onset of albuminuria was delayed

1-3 days in those receiving Pyribenzamine in both series. Histologically, severe glomerular and tubular damage was present in all animals receiving NTS. No difference in severity was noted between those treated with Pyribenzamine and the untreated controls.

These results are in contrast with those of Reubi(6,7) who reported modification of nephritis using "Antistine" 50 mg subcutaneously twice daily and 75 mg 4 times daily, with diminution of albuminuria and striking improvement histologically. He concluded that histamine or "H substance" was of primary importance in the pathogenesis of nephritis, both experimental and in man. No evidence for a role of histamine in this tissue-damaging, antigen-antibody reaction was obtained in this experiment.

Summary. Acute nephritis was produced in rabbits by the injection of duck anti-rabbit-kidney serum. Attempt to modify the reaction by the intensive administration of Pyribenzamine was ineffective as judged by the histological picture, although it was accompanied by a slight delay in the onset of albuminuria.

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Simultaneous Occurrence of Two Immunological Types of Group A "Coxsackie" Virus in a Case of Herpangina. (19053)

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(Introduced by Karl Habel.)

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We are reporting the isolation of 2 Coxsackie viruses present simultaneously in the same individual because it represents an unique situation arising during our investigations of these agents(1,2). It has occurred in only one of the 106 persons from whom we have isolated Group A Coxsackie viruses dur-

ing the past 2 years.

Experimental. The 2 viruses were isolated from L.B., a 2-year-old Negro male, ill with herpangina, who was seen at the outpatient department of Children's Hospital, Washington, D.C., in August 1950. He was first seen 3 days following his onset of illness, at which time an acute stage blood specimen was drawn. A fecal specimen was obtained 4 days later and a convalescent blood specimen was drawn 15 days following the onset of illness.

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