Missouri Section.

Washington University Medical School, May 9, 1934

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Skin Lesions Produced by Intradermal Inoculation with Hemolytic Streptococci.

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To determine whether any strain specificity could be shown in freshly isolated hemolytic streptococci from erysipelas as compared with those from other sources, intradermal injections into rabbits were made with 10 strains from erysipelas, 10 from scarlet fever, 3 from acute abscesses, 2 from meningitis, and 5 stock strains, including 2 originally isolated from acute mastoiditis, and the scarlatinal strains NY 5 and Dick II, and erysipelas strain A I furnished by the New York City Department of Health Laboratories. The dosage was 0.02 of an emulsified 24-hour blood agar slant injected into the depilated skin of the back, 2 rabbits being tested with each strain. In no instance did a spreading erysipelas develop, the lesion produced being a localized reddened indurated swelling involving from one to 10 sq. cm., reaching its height on the second or third day, and subsiding slowly. Occasionally an abscess formed. The results are summarized in Table I.

Although the appearance of the lesion was identical with all organisms used, the strains from erysipelas produced slightly larger areas of skin involvement, the average size of the lesion produced by erysipelas strains being 3.55, that of scarlet fever strains 1.66, and that of the organisms from septic lesions 1.35 expressed as square centimeters. The stock strains used showed lesions similar in size and character to those produced by freshly isolated organisms from septic infections.

Three strains from scarlet fever and 3 from erysipelas used intradermally were each passed through 3 rabbits. After such passage the skin lesions produced by the erysipelas strains were of approx-

TABLE I.

Scarlatinal		Erysipelas		Miscellaneous		
Size of skin lesion in mm.	Abscess Formation	Size of skin lesion in mm.	Abscess Formation	Source	Size of skin lesion in mm.	Abscess Formation
10 x 10	—	30 x 15	+	Meningitis	10 x 10	—
10 x 10	—	20 x 15	—		10 x 10	—
15 x 15	—	25 x 20	+	Adenitis	15 x 10	—
10 x 10	—	20 x 20	+		10 x 10	—
10 x 10	+	25 x 20	+	"	15 x 10	—
15 x 15	—	35 x 30	+		10 x 10	—
25 x 25	+	15 x 15	—	Meningitis	10 x 10	—
15 x 15	—	15 x 15	—		10 x 10	—
10 x 10	—	20 x 20	—	Abscess	20 x 15	+
10 x 15	—	30 x 25	+		15 x 10	—
15 x 10	+	15 x 10	—	Stock	10 x 10	—
10 x 10	—	15 x 10	—	Mastoid 80A	10 x 10	—
15 x 10	+	30 x 25	—	Stock	15 x 10	—
10 x 10	—	20 x 20	—	Dick II	15 x 10	—
10 x 10	—	15 x 15	—	Stock A I	15 x 15	—
10 x 10	—	10 x 10	—	Birkhaug Erysipelas	15 x 15	—
15 x 15	+	10 x 10	—	Stock	10 x 10	—
15 x 10	—	10 x 10	—	N. Y. 5	10 x 10	—
15 x 10	—	15 x 15	+	Stock	10 x 10	—
15 x 10	—	10 x 10	—	Mastoid 80B	10 x 10	—

imately the same size as before and averaged 4.5 sq. cm. Each of the scarlet fever strains was found to involve a larger skin area than previously, the average size being 4.8 sq. cm., or an increase to the size of the lesion resulting from the erysipelas organisms.

While the experiments indicate that streptococci freshly isolated from erysipelas produce slightly larger skin lesions in rabbits than strains from other sources, this property is apparently not attributable to strain specificity since organisms from scarlet fever can after animal passage attain the same degree of skin infectivity as those from erysipelas.

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Effect of Gonadotropic Hormone Injections upon Hypophyses and Sex-Accessories of Experimental Cryptorchid Rats.

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The effects of castration upon the anterior hypophysis and accessory sex organs are well known and have been interpreted as re-