height for the heat-treated lots compared to 101 inches for the control.

An unanticipated result was the pollen sterility in all treated lots. Normal tassels were produced with well-developed florets, but the anthers were small and shriveled and for the most part remained enclosed in the glumes. In view of the fact that high temperatures sterilize the male germ cells in animals from amphibians to mammals, these results are highly significant. This influence on growth is an antivernalization effect and may have wide usefulness in the production of hybrid seed, especially if it is shown by plants other than maize. Further experiments are in progress.

Failure of Sodium Salicylate to Inhibit Hyaluronidase *in Vitro*

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When India ink or Evans Blue was injected with hyaluronidase into the skin of rabbits or human subjects following the administration of sodium salicylate, Guerra (*1*) observed decreased spreading as compared with normal controls. If this result was due to the inhibition of hyaluronidase by sodium salicylate, as concluded by Guerra, it should be possible to demonstrate an antagonistic effect of sodium salicylate on hyaluronidase *in vitro*.

Using the broth culture filtrate of a mucoid group A streptococcus as substrate, it was found that 0.005 ml. of a crude bovine testicular extract completely destroyed 0.5 mg. of hyaluronic acid. The addition to the reacting mixture of 5 mg. of sodium salicylate did not decrease the rate of disappearance of the hyaluronic acid, the amount of which was estimated by precipitation with acidified dilute horse serum (*3*).

In a second experiment, 1:100 dilution of crude testicular extract was prepared in 10 per cent sodium salicylate. This solution, as well as a 1:100 dilution of the same testicular extract without sodium salicylate, was tested for its ability to prevent the mucin clot formation by potassium hyaluronate prepared from human umbilical cord (*2*). Both solutions prevented clot formation, again indicating no inhibition of testicular hyaluronidase by the sodium salicylate.

The action of sodium salicylate on streptococcal hyaluronidase was also examined. A broth culture filtrate of a nonmucoid group A streptococcus as a source of the enzyme was combined with a filtrate of a mucoid group A streptococcus containing hyaluronic acid. The enzyme destroyed 0.5 mg. of hyaluronic acid on incubation overnight. The inclusion of 0.1 per cent sodium salicylate in the system did not alter the reaction. When broth containing 10 mg. per cent of hyaluronic acid was inoculated with a nonmucoid group A streptococcus, the hyaluronic acid was destroyed by the time maximum growth was attained. The addition of sodium salicylate to the broth did not retard the disappearance of the hyaluronic acid except in concentrations that inhibited growth. Sodium salicylate, 0.1 per cent, was slightly bacteriostatic; 0.05 per cent inhibited neither growth nor the destruction of the hyaluronic acid.

These experiments fail to demonstrate any inhibitory effect of sodium salicylate on testicular or streptococcal hyaluronidase.

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The Carcinogenic Action of Smegma[1]

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Carcinoma of penis does not occur in people who have been circumcised in the first weeks of life and is rare in people who have been circumcised in childhood or in early puberty. Circumcision in adult life does not affect the frequency of the disease. Phimosis seems to be a predisposing factor. Penile cancer is frequent where personal hygiene is poor; it is rarer where bathrooms are plentiful. All this has been known for decades, and various opinions have been expressed concerning causal relations. Little has been done, however, to establish experimentally the possible carcinogenic action of smegma. Fishman, Shear, Friedman, and Stewart (*1*) injected filtered suspensions of human smegma subcutaneously into 12 young mice of the A strain. No tumors were obtained either in these mice or in 20 young mice into whose distended vaginas smegma was introduced.

In our experiments mice of the Paris R 3 strain were used. No spontaneous malignant tumors of skin and no cutaneous papillomata have been observed in many thousands of mice of this strain in the Crocker Cancer Research Institute. Some of the mice were bred in the Crocker Institute, others in Beth Israel Hospital. They were kept in wooden cages with wire covers, were fed Rockland pellets, and were given water.

Since human smegma, which was used in the first experiments, could not be obtained in sufficient amounts, horse smegma was substituted. This particular substitution was made because penile cancer is frequent in the horse. Smegma is best obtained from dead horses in rendering plants or from anesthesized animals in a department of veterinary surgery. The smegma was kept dry in glass jars in the refrigerator or at room temperature. Generally it was impossible to discover whether the material came from a stallion or from a gelding. One batch was examined for male and female sex hormones, but none were found.

The nonsaponifiable fraction was prepared in the usual way. An analysis for fatty substances gave the following result: total fat, 45 per cent of dry substance (fatty acids, 32.2 per cent; phosphatids, 3.9 per cent; total cholesterol, 6 per cent; cholesterol esters, 2 per cent).

Cerumen, which resembles smegma in being a skin product that is retained on or near the surface of the body, was used

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