

cornea, and of the human mucous membranes. Furthermore, benzaldehyde solutions were found to paralyze also nerve conduction.

The toxicology of benzaldehyde has been worked out long ago, owing to its presence, in combination with hydrocyanic acid, in bitter almonds and other plants. As is well known, benzaldehyde is very little toxic, and can be taken by mouth in large quantities without any injurious effects. For this reason, it is official in the U. S. Pharmacopœia. The interesting local anesthetic properties of benzaldehyde found by the present author throw light upon the pharmacological action of compound tincture of benzoin and some other drugs. Practically, benzaldehyde is not as adaptable to clinical use as benzyl alcohol, because solutions of it are rapidly oxidized to benzoic acid. A detailed description of its pharmacological properties will appear in the *Journal of Pharmacology and Experimental Therapeutics*, and its relation to the therapeutic value of some well-known pharmaceutical preparations will be discussed more fully in a medical historical paper elsewhere.

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**A biological test for corpus luteum extracts in vitro.**

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The present authors have been engaged for some time in the study of the physiological action of various glandular extracts, and more particularly of their influence on the genito-urinary organs. In the course of these investigations, they have discovered a reaction produced by corpora lutea which it is deemed desirable to report in this place. It was found that aqueous or saline extracts of fresh and dessicated corpora lutea of various animals exert a powerfully stimulating action on the vas deferens and seminal vesicles. Small quantities of such extracts when introduced into a chamber containing a freshly excised vas deferens

preparation, suspended in warm oxygenated Locke or Tyrode solutions, stimulate the contractions of that organ, and the strength of the contractions is proportional to the strength of the drug introduced. All other glandular extracts tested, with the exception of the suprarenal and orchitic extracts, fail to elicit such contractions of the vas unless administered in very much larger doses. Epinephrin, the active principle of the suprarenal gland, stimulates these contractions more powerfully, while extracts of desiccated orchitic substance also stimulate these contractions only after doses twice as great as those of corpus luteum extracts.

The authors have studied extracts of fresh corpora lutea of the sow, and also extracts of various commercial preparations of the desiccated corpus luteum substance in respect to their action on the vasa deferentia of the dog, cat, rabbit, guinea pig, and the rat, and have found the most suitable and most sensitive preparation for testing the corpus luteum extracts to be a freshly excised vas deferens of the rat in Tyrode's solution. Such preparations, when treated with some corpus luteum extracts, may react by contractions in solutions corresponding to concentrations of 1:2,500 of the fresh gland, and they almost always react to concentrations of 1:1,000 of the fresh gland. It was interesting to note that the vas deferens, though very sensitive to the effects of the corpus luteum, does not react to extracts of ovarian substance proper. As far as the authors have been able to gather other data, both experimental and clinical, it seems that the activity of corpus luteum extracts, as indicated by the vas deferens preparations, runs parallel to the activity of those preparations as indicated by the other data. This organ, therefore, seems to furnish a convenient method of comparing the physiological activity of various corpus luteum preparations and some criterion for the testing of various chemical principles derived therefrom. Complete data of the present investigation will appear in due time in the *Journal of Urology*.