an effect of desoxycorticosterone acetate, both in war medicine and in general surgery, it was felt desirable to investigate the problem critically and objectively in the case of human beings. The results of observations on nineteen women undergoing radical mastectomy for treatment of carcinoma of the breast form the material for this study. Ten of the patients in this series were not given any desoxycorticosterone acetate and served as controls. The remaining nine were given the hormone preoperatively. The results of this study suggest that the preoperative administration of desoxycorticosterone acetate to women undergoing radical amputation of the breast is without benefit in the prevention of surgical shock.” 9 references.

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“For some years this laboratory has examined the quantitative effects of local anesthetics upon nerve action-potentials. . . . It was found that for sciatic nerve of R. Pipiens \( T \log R = Z \) when: \( T \) is the elapsed time in minutes between the application of the anesthetic and a decrease in action potential of 80 per cent. \( R \) is the ratio molarity—minimum effective molarity, minimum effective molarity \( Z \) is a constant. We propose to call the quantity \( Z \) the nerve-modulus for local anesthetics. It was found closely to approximate 5.50 for five local anesthetics of unrelated chemical structures. In the determination of local anesthetic-potency it is a common practice to use the minimal effective concentration \( (M_m) \) as a criterion of potency. \( M_m \) is frequently determined by successively testing solutions of decreasing concentrations. Because the relationship between block-time and molarity is hyperbolic the experimental determination of the minimum effective concentration presents practical difficulties. The use of the modulus \( Z \) renders this procedure unnecessary as from it the minimum effective concentration can be readily calculated. . . .

“The modulus permits direct comparison of solutions of unlike molarities. . . . For anesthetics having prolonged action such as Nupercain the calculated \( M_m \) was found to exceed the determined \( M_m \). These anesthetics block nerve-conduction for much longer periods than those for which the modulus was found to hold, recovery-time in some instances being as long as 3 or 4 hours contrasted with 30 minutes or less for anesthetics such as cocaine and procaine. The modulus proves useful in making rapid preliminary tests of new compounds. When it is found that the recovery time after 80 per cent block is longer than 30 minutes, the calculated \( M_m \) should be checked by direct experiment before attempting to use the modulus to calculate the relative potency \( P \).”

J. C. M. C.


“This investigation was instigated by an unfortunate anesthetic complication which occurred in the Neurosurgical Service of the Massachusetts General Hospital in 1938. A young woman who was rapidly losing her vision because of a hypophysial adenoma that compressed the optic chiasm had a complicating severe bronchiectasis. Operation was therefore undertaken with only local infiltration anesthesia. The moment the tumor had been satisfactorily exposed, however, the patient lost her nerve and insisted that she be