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XYLOCAINE: A NEW TOPICAL ANESTHETIC IN UROLOGY[1]

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Several months ago the urology service at this hospital began to investigate a new anesthetic drug. This new drug called Xylocaine (diethylamino-2.6 diethylacetanalide) was first described by Löfgren and Lundquist of Sweden and its pharmacological properties were studied by Goldberg, who compared it with procaine and tetrocaine as to toxicity, action on blood pressure, anesthetic qualities, including its use as a topical anesthetic, and local irritant action. He concluded that Xylocaine showed high degrees of anesthetic potency both for surface and infiltration purposes and that it displayed a combination of pharmacological properties which strongly urged its use for clinical purposes.

Of the many qualities desirable in an anesthetic, including low toxicity and effective interruption of painful stimuli, rapidity of action is especially important to the urologist who would prefer to be able to do cystoscopy without having to wait for long periods of time, while an anesthetic agent is taking effect. We believe that Xylocaine has these favorable attributes.

We have used Xylocaine in a 2 per cent solution as a topical anesthetic for transurethral procedures varying from mere passage of sounds to cystoscopy with extensive fulguration of bladder papillomas. Our results have been highly satisfactory and we have noted no untoward reactions. Approximately 10 cc are used for each cystoscopy except in females in whom Xylocaine soaked applicator sticks have been successfully used. It is extremely difficult to evaluate an anesthetic agent in cystoscopy wherein so much depends upon subjective differences as well as upon the technique and skill of the operator. In our series of 250 cases, we have made a special point of including those patients who had had previous cystoscopy either at this hospital or elsewhere when Xylocaine was not used. Almost without exception, these patients have expressed a definite preference for the procedure in which Xylocaine was used. In many instances the same operator had occasion to examine these patients with and without the benefit of Xylocaine and the results were rather decisive in favor of this agent.

Several cases in our series are worthy of mention. One 75 year old physician who had had recurrent bladder papillomas fulgurated at regular intervals under spinal anesthesia entered the hospital for treatment and refused spinal on this occasion. Highly satisfactory anesthesia was obtained using Xylocaine and approximately 15 bladder papillomas were fulgurated successfully. Two veterans who had suffered straddle injuries and ruptured urethras during the war have been coming to this hospital at regular intervals for urethral dilatations for several years. These men have both reported a definite difference and improvement following use of Xylocaine.

[1] The Xylocaine used in this study was furnished by Mr. Erik Bjaringer of the Astra Pharmaceutical Products.

Without exception definite subjective differences have been noted in those in whom cystoscopy is done with Xylocaine on one occasion and with other topical anesthetics on others.

Several months ago under the Section titled Queries and Minor Notes in the Journal of the American Medical Association a physician reported on the use of "Zylcaine" in local anesthesia. This product is stated "to contain in each cc procaine base, 0.075 gm.; Butyl aminobenzoate, 0.3 gm.; and benzyl alcohol, 0.25 gm., dissolved in peanut oil." This material is a long lasting anesthetic which has apparently produced some local untoward reactions. This agent is not the one described in this paper. The similarities in names justifies this brief comment.

SUMMARY

Xylocaine, a new topical anesthetic, has been used in some 250 cystoscopies without untoward results and with good, rapid anesthesia. Further clinical trial is warranted.

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