

Pleural fluid was aspirated from 10 tuberculosis patients under procaine anesthesia (1.5 cc. of 2 per cent solution) using a syringe uncontaminated by procaine. The average concentration of procaine was 0.0002 per cent in these fluids. It was then found that such a concentration of procaine is sufficient to inhibit the action of 0.003-0.005 per cent of sulfapyridine.

It is possible that after procaine anesthesia sufficient procaine may be present in the remaining chest fluid at least temporarily to inhibit the action of sulfapyridine and permit bacterial growth.

The effect of urethane was also studied, and it was found to exert no anti-sulfapyridine action in concentrations as high as 0.05 per cent.

R. D. D.

FELLOWS, E. J.: *The Toxicity and Local Anesthetic Activity of Three New Biphenyl Derivatives*. J. Pharmacol. & Exper. Therap. 72: 146-151 (June) 1941.

"Numerous modifications of para-aminobenzoic acid have been made since Einhorn demonstrated in 1899 that esters of this compound produced local anesthesia but Einhorn's diethyl-aminoethyl ester of para-aminobenzoic acid (procaine) still is the most extensively used of all the local anesthetic agents. . . . 1. The hydrochlorides of  $\beta$ -diethyl-aminoethyl-4-amino-4'-biphenyl carboxylate (compound V), di-( $\beta$ -diethylaminoethyl)-2-2'-diamino-5-5'-biphenyl-carboxylate (compound VI) and di-( $\beta$ -diethylaminoethyl)-5-5'-diaminodiphenate (compound VII) were found to have marked local anesthetic properties. 2. The anesthetic activity of V after intradermal injection is slightly greater than that of the hydrochloride of p-amino-benzoyl-diethylamino ethanol (procaine) but it is also more toxic subcutaneously and produces tissue damage. While the anesthetic potency of VI is somewhat greater it is also more than twice as toxic subcutane-

ously as procaine. The marked anesthetic activity of VII as compared with procaine is offset by a five fold increase in subcutaneous toxicity. 3. The irritant properties of V and the poor depth of anesthesia produced by VI and VII make the present biphenyl compounds inferior to cocaine as topical anesthetics. 4. Comparison of V with closely related substances discloses that position of the substituent groups on the biphenyl nucleus alters local anesthetic activity. This also was observed in the case of compounds VI and VII." 6 references.

J. C. M. C.

SPINK, W. W., AND BELLIS, C. J.: *Sulfathiazole and Sodium Sulfathiazole in the Treatment of Postoperative Pneumonia*. Surg., Gynec. & Obst. 72: 989-994 (June) 1941.

"The term 'postoperative pneumonia' is applied to patients having a lobular or lobar type of consolidation, or a purulent bronchitis with a low-grade type of parenchymal inflammation usually accompanied by atelectasis. The pneumococcus is the etiological agent in the majority of cases.

"Twenty-two patients with postoperative pneumonia were treated with sulfathiazole and/or sodium sulfathiazole with satisfactory clinical results.

"Since sulfathiazole causes less nausea and vomiting, and appears to be equally as effective for pneumococcal pulmonary infections as sulfapyridine, it is recommended that sulfathiazole or sodium sulfathiazole should be used in the treatment of postoperative pneumonia." 11 references.

J. C. M. C.

GOYAN, F. M., AND DANIELS, T. C.: *Certain Salts of Atropine, Ephedrine, Epinephrine and Procaine*. J. Am. Pharm. A. 30: 98-105 (April) 1941.

"It is often desirable to reduce the acidity of solutions of the hydrochlorides, hydrobromides and sulfates of