

In addition to the above study, five patients from each group had 4 bloods drawn—a total of 40 blood specimens. Serum activity in undiluted serum and three dilution were tested against five bacterial species. The results showed no appreciable difference in vitro activity of serum from patients treated with tetracycline alone and those treated with the novobiocin-tetracycline combination.

5. This report consists of clinical studies from three investigators who submitted a total of 106 cases. The majority of cases were upper respiratory infections, many with negative cultures or normal flora reported. Of the patients treated with "Panmocin" (tetracycline hydrochloride) response was rated as good to excellent in 38 individuals, compared to 36 so rated after treatment with Panalba (novobiocin-tetracycline hydrochloride).

7. This clinical study of 44 patients in the pediatric age group was conducted by James A. Dugger, M.D. during March and April 1960. The patients were diagnosed as respiratory infections (pharyngitis, otitis media and bronchitis) and soft tissue infections (paronychia—2 cases). All were treated with "Panalba" drops in doses ranging from 50 mg tetracycline and 25 mg novobiocin T.I.D. to 100 mg tetracycline and 50 mg novobiocin T.I.D.

*Comment:* These were clinical diagnoses, no laboratory diagnosis is reported. therefore proper evaluation of the treatment results cannot be made

8. This report consists of an eight volunteer cross-over study using single doses of tetracycline hydrochloride 250 mg, 125 mg novobiocin, 250 mg tetracycline hydrochloride and 125 mg novobiocin in drop and granule dosage forms. Serum from all bloods drawn at 2-4-6 and 12 hours failed to inhibit growth of two strains of staphylococcus aureus—1 resistant and 1 sensitive. The combination drugs rated no better than the tetracycline alone.

9 and 10. Reports of a clinical study submitted by Charles H. Fish, M.D. on the comparative therapeutic effect of tetracycline versus tetracycline and novobiocin in 38 children with shigellosis. The protocol and controls are considered satisfactory. Results were good in all cases however 8 cases treated with tetracycline are reported as relapses versus 2 relapses of those treated with the combination.

*Comment:* These findings cannot be explained since novobiocin is of no therapeutic value in shigellosis.

11. This report gives results of a 8-man, 4-way crossover blood level study comparing tetracycline-novobiocin drops, tetracycline-novobiocin drops, tetracycline-novobiocin granules, tetracycline and novobiocin. Tetracycline values were approximately the expected however novobiocin levels were erratic and very low.

*Conclusion:* The tetracycline 250 mg/2.5 ml and novobiocin 125 mg/2.5 ml combination should be considered unsatisfactory from this particular crossover study.

12. This mouse toxicity study shows no synergistic toxicity of an equal part tetracycline-novobiocin mixture.

13. This letter is a supplemental report on the use of "Panalba", "Albamycin" and "Albacillin". No pertinent information is presented for the purpose of this review.

14. This report concerns a crossover study of 10 subjects given 2 capsules containing 250 mg each of tetracycline phosphate and novobiocin the first dose. Five days later the subjects were crossed over and given 4 capsules 500 mg each of the two drugs.

*Comment:* Both tetracycline and novobiocin serum levels are depressed.

15. This summary of a clinical study of 425 individuals treated for a variety of infections (except 75 individuals with normal knee joints used as controls in the study of knee joint infections). The study is in the form of a testimonial and cannot be evaluated. Since this study was reported in 1957 by Dr. Murrill M. Szucs, it is doubtful if any copies of his actual studies still exist.

16. This is a testimonial letter from Dr. Jack Weiner reporting on results of treatment of one case of cystic acne and suppurativehidradenitis. No comment necessary since complete details of the case are not included. Dated January 1957.

17 and 18. Communication from Dr. Arthur P. R. James to Dr. Dugger of Upjohn Labs. concerning treatment of acne with novobiocin-penicillin and tetracycline-novobiocin combinations. #18 consists of 92 case reports of dermatologic cases (clinical diagnosis only). These cannot be evaluated under present requirements.

19. This is a duplicate of report #9.