phenicol blood levels should be determined frequently for every premature and newborn infant, and an attempt should be made to maintain a blood level as near 10 to 20  $\mu g$ ./100 ml. of serum as possible. It is also advisable to make blood level determinations for any infant if the drug is given for more than four days.

Preparations.—Injection: Powder 250 mg., 1 gm.
Supplied by.—Parke, Davis & Company [Chloromycetin Sodium Succinate].

Year of introduction: 1959. Evaluated for N.N.D. 1962. Revised: 1965.

[From Clin-Alert, Aug. 18, 1966]

## CHLORAMPHENICOL

## OPTIC TOXICITY

Blindness occurring in children with cystic fibrosis has been reported by several investigators, and it has been suggested that the ocular complications are due to severity of the disease or to its treatment (Clin-Alert No. 11, 1966). The authors studied 42 children with cystic fibrosis of whom 19 were found to have some degree of engorgement of the retinal vessels, and this was related to the severity of their lung disease and not to antibiotic therapy. Ocular damage was not observed in patients receiving very large amounts of tetracyclines, sulfonamides, erythromycin, and novobiocin. However, of 19 children who had been given chloramphenicol, one developed optic neuritis after receiving the drug for 69 weeks, and this caused permanent blindness. Chloramphenicol should probably not be given to children with cystic fibrosis for periods longer than one month because optic neuritis has occurred after only 3½ months of such treatment.—Keith et al. (London, Eng.), Arch. Dis. Child. 41: 262 (June), 1966.

[From the American Journal of Disabled Children, July 1966, vol. 112, pp. 46-48]

OPTIC NEURITIS AND CHLORAMPHENICOL

(By Nora Chang, M.D., Conrad L. Giles, M.D., and Robert H. Gregg, M.D.,\* Detroit)

Optic neuritis has been associated with chloramphenicol therapy in both adults and children.1-9 It is our purpose to report two additional cases occurring in children with cystic fibrosis, who were treated with large doses of chloramphenical over a prolonged period of time.

## REPORT OF CASES

Case 1.—This 5-year-old white girl is one of apparently identical twins with moderately advanced cystic fibrosis. The diagnosis was established elsewhere on the basis of symptoms which began at the age of 2 months. The diagnosis was confirmed here at the age of 3 years on the basis of the clinical picture, the chest x-ray, and a sweat test (chloride greater than 100 mEq/liter).

Treatment included postural drainage, nighttime mist tent, pancreatic extract, vitamins, and sodium oxacillin at various times. At the age of 4½ years (July 1964), because of progression of her respiratory disease, she was given chloraming. phenicol in a dose of 750 mg/day (57 mg/kg). This dose was continued for a period of 6½ months, and the oxacillin was continued simultaneously. At this time the mother reported evidence of visual impairment and the chloramphenicol was discontinued and oxacillin continued.

Ocular examinations at that time revealed a vision of counting fingers only at two feet. Ophthalmoscopically she demonstrated dilated and tortuous veins with mild edema of the disc in each eye. The diagnosis of retinopathy of cystic fibrosis in association with optic neuritis, probably due to chloramphenicol, was made.

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Note.—Numbered footnotes at end of article, p. 2676.