

related to the severity of the pulmonary disease. More recently, vision alterations have been reported related to prolonged use of chloramphenicol.

Recent experience with optic neuritis in a child with cystic fibrosis has led to this case report, and subsequent suggestion for refinement of concepts relating to visual and fundal changes in cystic fibrosis.

CASE REPORT

C. L. was a 9-year-old Caucasian girl with proved cystic fibrosis and moderately extensive pulmonary disease. With no previous experience with extensive antibiotic therapy, she began a course of treatment with chloramphenicol in late August, 1963, which continued until the middle of January, 1964. The total dose given over the 4½ month period was 135 Gm.; the daily dose was 1 Gm. The organism, *Pseudomonas aeruginosa*, was sensitive to chloramphenicol. Three attempts were made to withdraw the drug. On each occasion the child became febrile within 24 hours. Treatment with alternate drugs was unsuccessful, and symptoms cleared only after restarting chloramphenicol. Physical, hematologic, and chemical examinations at weekly or biweekly intervals showed no sign of adverse change. In October, 1963, her vision was 20/40 in both eyes. Her basic disease remained stable under treatment.

Other than chloramphenicol, the patient was taking 400 mg. of glyceryl guaiacolate, pancreatic supplement tablets with each meal, and one standard multivitamin capsule daily. In addition, positive pressure inhalation therapy followed by postural drainage was done on a regular basis.

On Jan. 17, 1964, the child was admitted to the hospital following discovery of a severe loss of vision that had been concealed for 3 or 4 weeks. On retrospective questioning, the onset was noted to have been gradual, starting with haziness of objects. Within a week or so, fine, then large, print became blurred. One week prior to admission she could see no more than shadowy outlines of even the largest objects. Her teacher could date a deterioration of handwriting and reading ability to the approximate time of onset of visual symptoms.

Physical examination on admission showed a normal temperature, pulse, and respiration rate. She was 127 centimeters (50 inches) tall and weighed 23 kilograms (50.5 pounds). Pulmonary findings were minimal with no evidence of superimposed acute infection. There was no cyanosis or clubbing of the fingers. Positive neurologic finding were limited entirely to the optic nerve with no evidence of clouded sensorium nor other cranial or peripheral nerve involvement. Fundoscopic examination revealed choked nerve heads bilaterally with elevation of one to two diopters of the disc. Veins were moderately engorged and tortuous. There were flame hemorrhages radiating from the disc. Visual fields showed peripheral constriction with dense central scotomas (Fig. 1). Visual acuity was 5/400.

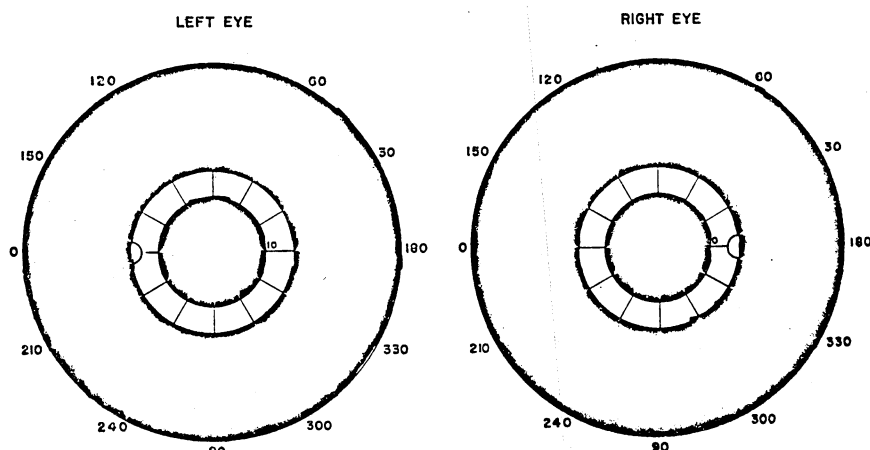


Fig. 1. Visual fields Jan. 22, 1964. Vision 5/400 in both eyes.