

- (1) In most cases therapy with chloramphenicol had been instituted within the first 48 hours of life.
- (2) Symptoms first appeared after 3 to 4 days of continued treatment with high doses of chloramphenicol.
- (3) The symptoms appeared in the following order:
 - (a) abdominal distension with or without emesis;
 - (b) progressive pallid cyanosis;
 - (c) vasomotor collapse, frequently accompanied by irregular respiration;
 - (d) death within a few hours of onset of these symptoms.
- (4) The progression of symptoms from onset to exitus was accelerated with higher dose schedules.
- (5) Preliminary blood serum level studies revealed unusually high concentrations of chloramphenicol (over 90 mcg./ml. after repeated doses).
- (6) Termination of therapy upon early evidence of the associated symptomatology frequently reversed the process with complete recovery.

ADMINISTRATION

Chloramphenicol, like other potent drugs, should be prescribed at recommended doses known to have therapeutic activity. Administration of 50 mg./kg./day in divided doses will produce blood levels of the magnitude to which the majority of susceptible microorganisms will respond.

AS SOON AS FEASIBLE AN ORAL DOSAGE FORM OF CHLORAMPHENICOL SHOULD BE SUBSTITUTED FOR THE INTRAVENOUS FORM BECAUSE ADEQUATE BLOOD LEVELS ARE ACHIEVED WITH CHLORAMPHENICOL BY MOUTH.

The following method of administration is recommended:

Intravenously as a 10% solution to be injected over at least a one-minute interval. This is prepared by the addition of 11 cc. of an aqueous diluent such as water for injection or 5% dextrose injection.

The "Infant Size" package (Steri-Vial No. 148) contains 250 mg. This should be reconstituted with 2.75 cc. of diluent.

DOSAGE

Adults

Adults should receive 50 mg./kg./day in divided doses at 6-hour intervals. In exceptional cases patients with infections due to moderately resistant organisms may require increased dosage up to 100 mg./kg./day to achieve blood levels inhibiting the pathogen, but these high doses should be decreased as soon as possible. Adults with impairment of hepatic or renal function or both may have reduced ability to metabolize and excrete the drug. In instances of impaired metabolic processes, dosages should be adjusted accordingly. (See discussion under Newborn Infants.) Precise control of concentration of the drug in the blood should be carefully followed in patients with impaired metabolic processes by the available microtechniques (information available on request).

Children

Dosage of 50 mg./kg./day divided into 4 doses at 6-hour intervals yields blood levels in the range effective against most susceptible organisms. Severe infections (e.g., bacteremia or meningitis), especially when adequate cerebrospinal fluid concentrations are desired, may require dosage up to 100 mg./kg./day; however, it is recommended that dosage be reduced to 50 mg./kg./day as soon as possible. Children with impaired liver or kidney function may retain excessive amounts of the drug.

DSA-HH