A TREATMENT FOR CHRONIC RESPIRATORY DISEASE (SNUFFLES) IN THE RAT

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During shipment from vendors, rats may sometimes contact colds, "red nose", chronic respiratory disease (CRD or snuffles), middle ear disease or other ailments. New animals can easily be replaced, but such infectious diseases also crop up in well-tended animals and may precipitate an epidemic. When snuffles spread through our colony, some animals were isolated in an attempt to find a treatment. Bacterial cultures of lung tissue were negative. Heavy doses of penicillin (Crystifor 400, E. R. Squibb and Sons), oxytetracycline HCl (Terramycin, Chas. Pfizer and Co.) administered in drinking water or intraperitoneally to different groups of animals did not effect a cure. But chloramphenicol (Chloromycetin, Park, Davis and Co.) in very heavy doses was effective.

An effective procedure for treatment of snuffles in the rat was:

(1) Isolate the animal. (Discontinue training if it is to be retained in the experimental group).

(2) Keep room temperature warm: 80°.

(3) Inject intramuscularly 0.1 cc/100 g of body weight of a 25% (250 mg/cc) solution of Chloromycetin, divided in two equal doses administered into each hind leg.

(4) Repeat every 6 to 8 hr for 2 or 3 days. If treatment is discontinued too soon, a relapse may occur.

The tail blood of the rat contains an average of 23% granulocytes (range 12-39%) and 78% lymphocytes (range 55-96%) (Farris and Griffiths, 1962). Rats with snuffles were found to have about 40% lymphocytes and 60% granulocytes. After treatment with Chloromycetin, the differential count returned to normal in approximately six days.

Differential blood cell counts should be made (Wright's stain) and compared with counts obtained from normals of the same strain. Training may be resumed after the count has returned to normal.

No blood dyscrasias were observed in the 10 animals treated during or for one month after this drug was administered.

REFERENCE

- Farris, E. J. and Griffith, J. Q. *The rat in laboratory investigation*. New York: Hafner Publishing Co., (2nd. ed.), 1962.

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