

Reports

Mycoplasma pneumoniae: Proposed Nomenclature for Atypical Pneumonia Organism (Eaton Agent)

Previous epidemiologic studies have shown that most primary atypical pneumonia illnesses in which cold agglutinins develop are associated with the agent first described by Eaton, Meiklejohn, and van Herick in 1944 (1-8). In addition the agent causes a spectrum of effects ranging from inapparent infection to febrile respiratory disease without pneumonia (5, 6).

Recent studies have established that the organism, previously known as "primary atypical pneumonia virus" or "Eaton agent", is not a virus but a member of the genus *Mycoplasma* (pleuropneumonia-like organisms) (9-11). Thus, at least 30 strains have been grown in cell-free semisolid or liquid medium containing bovine heart infusion, yeast extract, and horse serum (10-13). Growth does not occur in the absence of serum or a suitable substitute such as egg yolk (10, 14). The colonies which grow on semisolid agar medium exhibit a colonial morphology and fine structure characteristic of *Mycoplasma* (10). Certain microbial inhibitors such as thallium acetate, penicillin, and amphotericin B do not affect growth of the organism (10, 11). The agent is inhibited, however, by the tetracycline group of antibiotics (15).

Until recently only four species of mycoplasma were known to infect man. These are *M. hominis* type 1, *M. hominis* type 2, *M. salivarium*, and *M. fermentans*. (16-18). When the atypical pneumonia organism was compared with these species by immunofluorescence or complement-fixation tests it was antigenically distinct (10, 19-21). It resembles *M. fermentans* in utilizing glucose and other sugars (22). The agent differs biologically from the four recognized human species of *Mycoplasma* by its ability to produce rapid and complete hemolysis of guinea-pig and horse red cells (23, 24). Under

identical conditions of testing *M. hominis* type 1, *M. hominis* type 2, *M. salivarium*, and *M. fermentans* produce only delayed partial hemolysis of guinea-pig erythrocytes (24).

In view of the distinct antigenic and biologic properties of the atypical pneumonia agent, it would seem appropriate to classify it as a distinct species of *Mycoplasma*. We propose the name *Mycoplasma pneumoniae* to connote its relationship to atypical pneumonia.

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Flicker Fusion Frequency of Electroretinogram in Light-Adapted Goldfish at Various Temperatures

Abstract. *The light intensity-fusion frequency relationship of the goldfish electroretinogram follows the Ferry-Porter law except at the higher intensities. Maximum fusion frequency increases with temperature thus contradicting the results of studies elsewhere on the behavioral responses in sunfish.*

Terrestrial vertebrates have been the subjects in most studies of flicker electroretinogram (ERG). In man (1), cat (2), guinea pig, and pigeon (3) the ERG flicker fusion frequency increases linearly with the logarithm of