A New Species of Mycoplasma Has Been Isolated and Characterized

NIAID investigators have isolated and characterized six new strains of mycoplasma from the human oropharynx. The strains appear to constitute a new species for which the name *M. orale* type 3 is proposed.

An extensive study of respiratory disease conducted by NIAID investigators has resulted in the isolation of some 437 strains of mycoplasma from the human oropharynx.

As six of the strains isolated under anaerobic conditions appeared sufficiently different from reference strains, they were further studied. They produced nipple colonies with weak hemolytic activity for guinea pig erythrocytes on agar medium, required fresh yeast extract for growth, and metabolized arginine with a concomitant shift in the pH of the medium.

The six strains shared some antigen with other arginine-utilizing mycoplasmas when tested by agar gel diffusion and they also fixed complement in a one-way cross-relationship with two other mycoplasmas. However, the new strains appeared unrelated to other species when tested by the more specific growth-inhibition and metabolic-inhibition techniques.

On the basis of these findings, the new serotype (comprised of strains DC-333, DC-440, DC-752, DC-114, DC-1302, and DC-1316) was deemed distinct from the 23 known mycoplasma serotypes of human, animal, and avian origin. The investigators therefore proposed it be recognized as a new species, designated *M. orale* type 3 and that DC-333 be considered the representative strain of the series.

These findings by Mr. H. Fox and Drs. R. H. Purcell, and R. M. Chanock, Laboratory of Infectious Diseases, NIAID were presented in the *Journal of Bacteriology*. 

Dorland J. Davis, M.D.