

## NOTE

### A BACTERIOPHAGELIKE PRINCIPLE FOR PSEUDOMONAS PYOCYANEA (PSEUDOMONAS AERUGINOSA)

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A specimen of feces from a patient with acute colitis was forwarded to the laboratory for routine examination and culture. On MacConkey's medium several abnormal colonies of *Pseudomonas pyocyanea* were noticed.

The organism was isolated and subcultured on nutrient agar, and where growth was confluent the same abnormality previously noticed was present. In confluent areas of bacterial growth plaque formation similar to that found during bacteriophage activity in the *Salmonella* group was apparent.

Cultures in trypsin broth were prepared from the plaques and were rendered bacteria-free by Seitz filtration. A stock strain of *P. pyocyanea* which did not show plaque formation was treated with serial dilutions of the filtrate. Plaques developed in a maximum dilution of  $1/10^{-6}$ .

Secondary growth developed on the plaques. Subculture and treatment of these organisms with the phagelike filtrate indicated that some secondary growth organisms were lysable, whereas others were not lysable and grew normally.

These observations lead to the hypothesis that there is a bacteriophage for *P. pyocyanea* and that the phage can exist in susceptible and nonsusceptible strains.

Investigation of this problem is being continued and will be reported at a later date.