a lavender growth. Agar had not yet been incorporated into culture media, and Schroeter could only describe the growth of these micrococci on potato. We are indebted to Eleanore H. Clise for her review of the literature covering the genus *Micrococcus*.

Among the micrococci this organism is unusual in forming pigment on potato, but none on agar medium. A marked difference in pigment production on potato compared to agar is well established for members of other genera, including *Pseudomonas*, *Erwinia*, *Serratia*, *Cellumonas*, *Bacillus*, and *Clostridium*.

In case this organism should prove to be a species not heretofore described, we suggest the name *Micrococcus moricolor* from the Latin, "color of mulberry."

The organism described in this paper was isolated three times in a series of 140 micrococci and staphylococci. The coccus was recovered from the open wounds of three different patients, where it apparently occurred as a contaminant.

EFFECT OF INTRACRANIAL PENICILLIN THERAPY ON BRAIN INVOLVEMENT IN EXPERIMENTAL RELAPSING FEVER

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Received for publication February 3, 1945

In a previous paper (Science, **100,** 550) we reported failure to cure brain involvement in white rats infected with relapsing fever spirochetes (strain transmitted by *Ornithodoros turicata*) with intraperitoneal injections of penicillin adequate to prevent brain involvement and to cure blood stream involvement. We now have resorted to combined intracranial and intraperitoneal injections of the penicillin.

Seventeen rats which had been infected 12 to 40 days previously were divided into 6 groups. Groups I, II, and III were test groups of 3 rats each which received 1,000 units of penicillin intracranially, in addition to intraperitoneal injections of 400 units every 3 hours for 48 hours. Group I rats received 1,000 units of penicillin in a single intracranial injection. Group II rats received 2 intracranial injections of 500 units each, and group III rats received 3 intracranial injections of 333 units each at intervals of 3 hours. Group IV consisted of 3 control rats which received intracranial injections of buffer solution (penicillin diluent) comparable in amounts to the penicillin received by the test rats in groups I, II, and III. Group IV rats were anaesthetized with the same dose of phenobarbital used on the test rats, and received the same total dose of penicillin (7,800 units) as the test animals in 17 intraperitoneal injections. Group V consisted of 2 control rats which received no phenobarbital and no intracranial injections, but received the same total amount of penicillin (7,800 units) as the test animals in 17 intraperitoneal injections. Group VI consisted of 3 control rats which were untreated.

One rat in group I, one in group III, and two in group IV died within a few hours after the first intracranial injection and were discarded. One additional rat in each of the test groups I, II, and III died during the course of intraperitoneal injections after receiving 1,600, 2,000, and 5,200 units of penicillin, respectively, in addition to 1,000 units intracranially. These rats were placed in the icebox and were used in the brain passage phase of the experiment. The death of these animals was attributed to barbiturate poisoning, although brain injury may have been involved, especially in the early deaths.

Two days after termination of the penicillin treatment, the brains of the 4 surviving, the 3 icebox-preserved test rats, and the 6 surviving control rats were removed, emulsified, and passed to fresh rats. Uniform (0.01 ml of 1:20 dil.) dark-field preparations of the tail blood of each of these passage rats were examined daily for 10 days. All 6 of the control passage animals became positive within 3 to 6 days, whereas the 7 test passage animals remained negative throughout the ten-day examination period.

Thus it would appear that penicillin injected intracranially is capable of curing the brain involvement in experimental relapsing fever of the white rat. Minimum curative doses for both brain and blood stream involvement remain to be determined.

INCREASING PENICILLIN YIELDS WITH CORN OIL

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Received for publication February 9, 1945

Investigative work on antibiotic agents is proceeding so rapidly the lone investigator often finds that what he considers a fundamental discovery is a recognized fact among research groups engaged in these studies. However, the writer has made an observation while studying the growth habits and nutritive requirements of *Penicillium notatum* that apparently has not been recorded in the literature.

In an effort to find an agent that would readily float the mold spores on the surface of a fluid medium, corn oil was added in 2 per cent concentration to Czapek-Dox medium modified by the substitution of brown sugar for glucose. In due time it became evident that the corn oil served as more than a mechanism for floating the spores and permitting the ready development of an abundant and uniformly distributed mold growth. After an initial drop in acidity, the pH of the broth returned to 6.9, where it remained relatively constant for the duration of the experiment. The penicillin content of the medium gradually increased and on the twenty-second day after seeding was sufficiently concentrated to permit a 1:320 dilution of the broth to induce inhibitory zones with diameters of 22 to 25 mm on agar plates inoculated with the "H" strain of *Staphylococcus aureus*. Eimer and Amend "penicylinders" were used as test