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A Micrococcus Causing a Condition Clinically Very Similar to a Mycosis.

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Morphological and Staining Characters. This coccus for which I have suggested the name *M. myceticus* at times morphologically resembles the gonococcus, at times an ordinary streptococcus. Certain strains when recently isolated are practically gram negative, but after subculturing they usually become gram positive.

Cultivation and Isolation from the Lesions. Absence of growth on ordinary agar when inoculated direct from the lesions. The isolation of the organism is rather difficult, as the organism does not grow at first on ordinary agar and various sugar agars; agar tubes inoculated with pus direct from the lesions do not show any growth; it grows on certain special media, the best apparently being creatinin and uric acid agar, but even on these special media the growth is very scanty at first. Later it can be trained to grow on practically all ordinary media, the best medium being Löffler's serum, but the growth is always scanty.

Creatinin Agar. On neutral creatinin agar the growth is fairly visible, though scanty; it somewhat resembles the delicate growth of certain streptococci on ordinary agar.

Uric Acid Agar. The organism grows on this medium, but more scantily than on creatinin agar.

Growth on Ordinary Media. While apparently the organism does not grow on ordinary media (agar and various sugar agars) when these are inoculated direct with material from the lesions, it grows on such media, though scantily, when transplanted from creatinin and uric acid agar—and it can then be made to grow indefinitely provided subculturing is carried out every 3 days; certain strains may die suddenly.

Glucose Agar. On acid glucose-agar, as a rule, there is no growth; on neutral 4% glucose agar a scanty growth of the organism may take place, but it is usually extremely poor.

Serum. A delicate growth; there is no liquefaction of the medium. After several transplantations the growth is quite good.

Gelatine. No liquefaction.

Biochemical Reactions. When the organism has been trained to grow on ordinary media its biochemical properties can be investigated in the usual way.

Pathological Conditions from which the Organism has been Isolated. I have found the organism for some years in certain cases of chronic condition clinically resembling a streptothricosis, the skin being thickened and showing several nodules and also sinuses. In the open lesions staphylococci and many other organisms are found. In the lesions which have not opened only *Micrococcus myceticus* is found.

Pathogenicity of Micrococcus myceticus. In a volunteer the subcutaneous injection in the leg of one-third cc. saline emulsion of the strain of *Micrococcus myceticus* isolated from the patient produced within a few hours a rather painful round red patch the size of a 5 cent piece, with fever, maximum 102° F., which lasted for 24 hours. The patch slowly increased in size, becoming a dark red color until it became more like a rather flat nodule, the center of which slowly softened and spontaneously opened 4 weeks after the injection, a small sinus formed which took 2 months to heal. The subcutaneous injection in rabbits in the abdominal region slowly produces a localized nodule which later on—2 to 4 weeks after the inoculation—softens and becomes open with discharge of pus.

This coccus differs from the usual streptococci in some cultural characteristics (grows at first only on certain special media, etc.) and in the peculiar lesions it produces in man closely resembling mycotic lesions.

I shall be pleased to supply workers interested in the subject with cultures of the micrococcus I have briefly described.

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Some New Micrococci: M. Levulosinertis, M. Viscidus, M. Enteroideus, M. Afermentans.

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Micrococcus levulosinertis Castellani. Isolated by me a few weeks ago from a case of stomititis. Pathogenicity not proved. This coccus is interesting as it ferments glucose (acidity only), but not levulose. As a rule when an organism ferments glucose it will always ferment also levulose. In fact this is the first bacterial organism I have come across that does not do so. Litmus-milk is decolorized but the reaction is alkaline. The principal characters of the organism are collected in Table I.