

93 (2053)

Observations on the relation of bacterial giant coccoids to zygospore formation.

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The giant coccoids of the strain in the above paper have previously been shown to have been the precursors of a diplococcus mutant¹. Their viability is much greater also than that of the bacillary form. Such important functional differences lead to an inquiry regarding the nature of these structures. *B. coli* and its congeners, as well as diphtheroids, have been studied. Employing an environment that led the strains to reproduce in their fungoid or branching phase, a mechanism was demonstrated that was practically identical morphologically with zygospore formation as it occurs among the yeasts.

A very striking concomitant change was a spiral reorganization of the chromatic substance which took place in the filamentous forms which formed the zygospore. This was often so striking as to resemble the strands of a rope, such structures probably being identical with the so-called giant whips described first by Novy many years ago. Similar formations among the protozoa are spoken of as the "wurstformige Schlingen" which represents the most constant accompaniment of the sexual process among the protozoa.

¹ *Jour. Med. Res.*, 1920, xlii.