

cell well-stained coccus or diplococcus-like bodies. We are, however, unwilling to dwell too strongly upon these appearances, inasmuch as the endothelial cells showing these features were crowded with bacteria, and we could not exclude the possibility that in the process of preparation the cells might have become slightly dislodged, and that the appearance of the bacilli apparently outside the main body of the cells might be due to their presence in a slightly different plane.

Taking next well-developed rabbits similarly inoculated and killed at the end of twenty-four hours, we have found in them the presence of bacilli in the endothelial cells, while the brown shadows, as we may term them, have been present in enormous numbers in the liver cells.

Thus far, then, from what we have said, it would appear evident that when the colon bacillus enters into the circulation it is liable to be taken up rapidly by the endothelium lining the hepatic vessels, and in this process undergoes division into smaller segments, so that in the main one meets with stumpy forms in these cells, forms which still stain well, although often showing a tendency toward a diplococcoid appearance. Following up this within four hours these bacilli are discharged by the endothelial cells, and are by some means or other taken up by the hepatic cells and rapidly destroyed, so that it is only by careful examination that minute coccus or diplococcus-like bodies are discovered within the liver cells.

It is interesting to note that upon examining a film of the bile taken from inoculated animals at the end of twenty-four hours one can by careful preparation recognize in it these very minute diplococcus-like bodies. To see them it is necessary to make a very fine film, treat with weak acetic acid, wash, and then stain with dilute carbol-fuchsin, and examine under the highest power. It would, therefore, seem evident that the liver cells are capable of discharging these modified and destroyed bacilli into the bile capillaries.

But we now come to certain great difficulties in connection with the statements here made. In the first place, making a large series of control observations upon the livers of apparently normal adult rabbits we have frequently come across these same diplococcus-like bodies, and in four instances in relatively very great numbers. Indeed, these diplococcus-like bodies would seem to be very frequently present, more often present than absent from the rabbit's liver.