Determinants of Bacterial Infection

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Each step of bacterial infection requires involvement of specific proteins – determinants of pathogenesis. Adhesins are proteins responsible for identification of eukaryotic cell and attachment to selected cell. Intracellular parasites use phagocytic cells natural capacity to uptake microorganisms or trigger this process when invading non-phagocytic cells. After phagocytosis bacteria are encapsulated within endosome and use numerous strategies to survive. Few of them escape into cytoplasm like Listeria monocytogenes that’s using hemolysin – toxin disrupting endosome´s membrane. This toxin is also taking a part in other steps of Listeria’s pathogenesis. This pathogen is using a P60 protein that cannot be strictly classified as determinant of infection since it’s involved in cell wall metabolism. Although strong evidences show this protein is playing significant role in Listeria’s pathogenesis.