

FACTOR CONTRIBUTING TO MICROBIAL PATHOGENICITY

① Adhesion - simply means attachment. which is a highly specific process between surface receptor on host cell and ligands on the surface of microbial pathogen. Adhesive structures are called adhesins. These adhesins may be organised structure like Pili, fimbriae or colonization factor. and are called virulence factor. and loss of these adhesins makes the strain avirulent.

Adhesins are generally protein in nature and are antigenic.

eg. Neisseria sp which causes Gonorrhoea, and attached itself to the epithelial cells layers of human urethra etc by means of Pili and thus avoid to be washed away with mucous tears etc.

② Invasiveness - It is the ability of microbial pathogen to grow inside host tissue in such a large no. that it inhibit host function. Mo even cause disease through invasiveness even when it does not produce any toxin.
eg. Streptococcus sp strain which form capsule prevents the process of Phagocytosis used by host as defence mechanism. Encapsulated strains are highly invasive and able to cause disease Pneumonia. Noncapsulated strains are easily degraded by Phagocytosis.

It may be

① Localized

② Systemic (Generalized) - Involved spread of pathogen from the site of entry through tissue spaces through lymph or blood.