

## Chapter 4

### IN SURGICAL ISSUES; INFECTION AND MICROBIOLOGICAL DISEASES

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#### INTRODUCTION

Infectious diseases still the single commonest cause of illness within the community. ( Paul E. Farmer,2013) On the other side, most are not life threatening and are self-limiting illnesses which cause their victim no more than temporary incapacity. But furthermore if the victims have got some risk factors this conditions is changable. Especially surgical operations or surgery clinics the more have got microbiological load. In this chapter, we'll look at microbiological surgical infections risk factors.

Microbial factors affecting the formation of a wound infection are the effect of bacterial invasion, virulence and micro-envorement. When these microbial factors are conductive, the failure host defenders clarify the corner stone of activating the event chain that produces the wound infection. As known microbi-al concentration, which is powerly related with SSIs, is the bacterial counts for more than 10,000 organisms for per gram in tissue (or organisms each cm<sup>2</sup> of the wound, in the case of burned areas).Almost all surgical site infections (SSIs) source from by the patient's own endogenous flora, which are present on the skin, mucous membranes, or hollow visceras with contamination. The microbial concentration quoted as being highly associated with SSIs is that of bacterial counts higher than 10,000 organisms per gram of tissue this is related with the case of burned sites, organisms per cm<sup>2</sup> of wound. ( Krizek TJ&Robson MC,1975) The most responsible pathogens on the skin and mucosal surfaces are gram-positive cocci (especially staphylococci); but furthermoe, gram negative aerobs and anaerobic bacteria contaminate the skin in the inguinal / perineal regions.

The contaminating pathogens include gram negative bacilli (eg. Escherichia coli) and a large number of internal intestinal flora, containing enterococci and gram-positive microbes, including anaerobic organisms, in terms of gastrointestinal surgery. ( A report from the NNIS System,1996) Gram-positive organisms,

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