



<p>Infection caused by the direct implantation of an organism usually arises less than 3 months after surgery. These infections arise from:</p> <ul style="list-style-type: none"> The patient's own flora The OR environment The surgical team Contaminated implants 	<p style="text-align: center;">Risk Factors for Infection</p> <table border="0"> <tr> <td>Rheumatoid Arthritis</td> <td>Obesity</td> </tr> <tr> <td>Diabetes Mellitus</td> <td>Steroid use</td> </tr> <tr> <td>Remote Infection</td> <td>Malnutrition</td> </tr> <tr> <td>Previous Joint Infection</td> <td></td> </tr> <tr> <td></td> <td>Old Age</td> </tr> </table>	Rheumatoid Arthritis	Obesity	Diabetes Mellitus	Steroid use	Remote Infection	Malnutrition	Previous Joint Infection			Old Age
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<p style="text-align: center;">Incidence of Surgical Site Infections</p> <p>The operative site is the most common single site of nosocomial infection in surgical patients, and accounts for 30-40% of all infections in such patients. Most infections are bacterial in origin.</p>											
<p style="text-align: center;">Etiologic Agent Responsibility</p> <p>(The specific bacteria likely to cause infections at the operative site are predictable according to source of contamination.)</p> <p>A. Endogenous sources</p> <ol style="list-style-type: none"> 1. Mouth and esophagus-streptococci, <i>Bacteroides</i>, <i>Fusobacterium</i>, and peptostreptococci. 2. Stomach-enteric gram-negative bacilli 3. Biliary, colon and gynecologic sites- enteric gram-negative bacilli, group D strep, <i>B. fragilis</i>, and clostridia 4. Urologic-enteric gram-negative bacilli and streptococci 5. Central Nervous System and with foreign bodies -<i>Staphylococcus epidermis</i> <p>B. Exogenous sources (Contact, Direct, Indirect, and Airborne)</p> <p><i>Staphylococcus aureus</i> and coagulase-negative staphylococci</p>											
<p style="text-align: center;">An Ounce of Prevention Preoperatively</p>											
<ul style="list-style-type: none"> <input type="checkbox"/> Treatment of remote infections <input type="checkbox"/> Control of diabetes, weight reduction, improved nutrition, and discontinuation/decrease doses of steroid <input type="checkbox"/> Judicious use of short-term, preoperative prophylactic antibiotics for clean-contaminated or high risk clean procedures 											
<p style="text-align: center;">Optimize surgical technique</p> <table border="0"> <tr> <td data-bbox="66 999 738 1247"> <ul style="list-style-type: none"> <input type="checkbox"/> Expeditious surgery <input type="checkbox"/> Reduction of blood loss or hematoma formation <input type="checkbox"/> Elimination of dead space <input type="checkbox"/> Avoidance of unnecessary surgical drains <input type="checkbox"/> Placement of drains through sites other than the primary surgical site (stab wound) </td> <td data-bbox="738 999 1557 1247"> <ul style="list-style-type: none"> <input type="checkbox"/> Gentle handling of tissue <input type="checkbox"/> Debridement of devitalized tissue, removal of all purulent material by irrigation and suction, and removal of foreign materials from the wound <input type="checkbox"/> Use of closed drainage systems <input type="checkbox"/> Liberal use of delayed primary closure or second intention healing after contaminated or dirty operations </td> </tr> </table>		<ul style="list-style-type: none"> <input type="checkbox"/> Expeditious surgery <input type="checkbox"/> Reduction of blood loss or hematoma formation <input type="checkbox"/> Elimination of dead space <input type="checkbox"/> Avoidance of unnecessary surgical drains <input type="checkbox"/> Placement of drains through sites other than the primary surgical site (stab wound) 	<ul style="list-style-type: none"> <input type="checkbox"/> Gentle handling of tissue <input type="checkbox"/> Debridement of devitalized tissue, removal of all purulent material by irrigation and suction, and removal of foreign materials from the wound <input type="checkbox"/> Use of closed drainage systems <input type="checkbox"/> Liberal use of delayed primary closure or second intention healing after contaminated or dirty operations 								
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<p style="text-align: center;">Other Factors That May Reduce Infection Risks</p>											
<ul style="list-style-type: none"> <input type="checkbox"/> Patient pre-op bathing with antiseptic soap <input type="checkbox"/> Improved air filtration in the OR especially for implants <input type="checkbox"/> Traffic control in the OR suites 	<ul style="list-style-type: none"> <input type="checkbox"/> Pre-op antiseptic hand scrub by surgical team members <input type="checkbox"/> Barrier protection (mask, drapes, hoods, and gowns) <input type="checkbox"/> Depilatory or clipping in preference to shaving for hair removal at the operative site 	<ul style="list-style-type: none"> <input type="checkbox"/> Hair removal immediately before, rather than substantially before surgery <input type="checkbox"/> Antiseptic scrubbing of the skin at the surgical site <input type="checkbox"/> Limiting preop hospital stay 									
<p style="text-align: center;">Post-operative</p> <p>Closed wounds-Washing hands before dressing changes, avoiding direct contact with the incision, or the wearing of sterile gloves if contact with the incision is necessary are accepted, appropriate procedures.</p> <p>Open wounds-<u>require</u> sterile technique.</p>											

