**Operational Definition of Surgical Site Infection (SSI):** It is an infection that occurs after surgery in the part of the body where the surgery took place within 30 days post-operatively.

**Surgical Wound Classification:**

**Clean:** Sterile tissue with **no resident bacteria**, **wounds closed primarily** with/without closed drains e.g. neurosurgery, hernia, hydrocoele, breast surgeries.

**Clean-contaminated:** **Controlled entry** to tissue **with bacteria**, e.g. cholecystectomy, appendectomy, hysterectomy.

**Contaminated:** **Uncontrolled entry** to tissue **with bacteria** e.g. acute gastrointestinal perforation, dry gangrene, open fresh accidental wounds.

**Dirty or infected:** **Heavy contamination** or infection already established e.g. soil in wound, retained devitalized tissue with pus and perforated viscera with pus.

**ASA Grades:**

**ASA 1:** Normal healthy person.

**ASA 2:** Mild systemic disease (e.g. hypertension, well controlled diabetes)

**ASA 3:** Severe systemic disease not incapacitating (e.g. moderate COPD, diabetes, malignancy)

**ASA 4:** Incapacitating systemic disease that is a constant threat to life (e.g. pre-eclampsia, heavy bleeding)

**ASA 5:** Moribund patient, not expected to survive with or without operation (e.g. major bleed)

**SSI Identification:**

|  |  |  |
| --- | --- | --- |
| **Superficial SSI (Skin/ Subcutaneous)** e.g. cellulitis | **Deep SSI (Fascia/ Muscle)**  e.g. deep abscess | **Organ/ Space SSI (Deeper than Fascia/ Muscle)**  e.g. peritonitis, endometritis |
| Purulent drainage (pus) **OR** | Purulent drainage (pus) from deep incision **OR** | Purulent drainage (pus) from sterile organ or space (from an inserted drain) **OR** |
| Organism identified (if culture done) **OR** | Deep incision dehiscence or opened by surgeon **AND** | Organ or space infection/ abscess found on imaging/ examination **OR** |
| Superficial incision re-opened **AND** | Organism identified (if culture done) **AND** | Organism identified from fluid/ tissue from organ/ space |
| Infection symptoms- pus, redness, warmth, pain, localized swelling, fever >38C  **OR** | Infection symptoms- pus, redness, warmth, pain, localized swelling, fever >38C  **OR** |  |
| Surgeon/ attending physician’s diagnosis | Deep infection/ abscess found on imaging/ examination |  |

**Prophylactic antibiotic:** It is the antibiotic used **before surgery** to prevent infection. It may extend into the post-operative period based on the surgical wound classification.

**Therapeutic antibiotic:** It is the antibiotic administered for the treatment of SSI, once detected.