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STERILISATION

Application of sterilization processes in hospitals particularly with reference to surgical dressings and intravenous fluids

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Sterilization of Surgical Dressings

- Surgical dressing materials like cotton wool, gauze, bandages etc.
- Following stages involved in the sterilization of surgical dressings.
- Surgical dressing material wrapping or packing into a suitable container for this purpose use the metal drum & those drum perforated in order to free flow of steam or those materials are wrapped in muslin cloth or nylon bags.
- The surgical dressings is exposed for 30 to 45 mint at $121^{\circ}\text{C}.$, if surgical dressings are packed in metallic drum then it required longer time for sterilization.



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- After the sterilization the warm materials are not placed on the cold surface or in water because it causes contamination.

Sterilization of Transfusion Fluids

- The transfusion fluids or I.V fluids are transferred into washed & dried bottles.
- The bottles are loaded into sterilizer & door is closed.
- The bottles are exposed to the desired temperature & pressure for stated period.
- After sterilization those bottles are taken out from the sterilizer when these are cooled to less than 100⁰C.
- The bottles of transfusion fluids are then labeled.



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Precautions for handling of sterilization equipment

- By wearing sterilized gowns ,face masks and gloves before entering into aseptic rooms.
- The hair should be properly covered with sterilized caps.
- The hands should be thoroughly washed with soap and antiseptic solutions before handling the sterilized equipments.
- The working surface of the table should be thoroughly cleaned with disinfectant before starting the aseptic work.
- The sterilized equipments should be transferred from one place to another in a trolley, so that the aseptic room is not opened again and again.
- The sterilized air should be introduced under pressure in the aseptic room to maintain sterility.