

Surgery/Operation Theatre Lab Sciences (Surgery/OT Technology):

A surgical technologist, also called "operating room technologist", is an allied health professional working as a part of the team delivering surgical care and manages operating rooms.

A formal body called the Commission on Accreditation of Allied Health Education Programs (CAAHEP) officially recognize the AHPs



Roles of Surgical Technologist

As key member of operating room team, the surgical technologist must anticipate the needs of the patient and the surgeon to ensure that each operation goes as smoothly as possible.

Preoperative:

Carefully dons his or her operating room attire, including scrubs

Prepare and sterilize the room

Gathers all of the equipment and surgical tools that the surgery requires

Sterilizes, counts and carefully arranges them

Sterile fields can be compromised in a variety of ways, the most common is moisture. To prevent this arranging dry drapes around the operating table and keeping all surfaces in a sterile condition

Roles of Surgical Technologist

Intraoperative:

Help prepare medications and administer them to the patient

Assist in retracting tissues from the patient

Help the surgeons during operation

Postoperative: Tying Things Up

Counting all of the tools and instruments used during surgery to ensure that nothing is left behind in a patient

Suture the incision and apply disinfected dressings to the area

Dispose of items such as needles and gauze, and continue to maintain the OR's sterile environment until the patient is sent to the recovery ward

Surgery

Surgery is a medical specialty that uses operative manual and instrumental techniques on a person to investigate or treat a pathological condition such as a disease or injury, to help improve bodily function or appearance or to repair unwanted ruptured areas

Types of Surgery

Elective- Performed on the basis of client's choice; not essential and may not necessary for health.

Urgent- Necessary for client' health, may prevent additional problem from developing (e.g. tissue destruction);not necessarily emergency.

Emergent- Must be done immediately to save life or preserve function of body part.

Required- Has to performed at some point; can be pre-scheduled.

Types of Surgery

- **Diagnostic**-Allows to confirm diagnosis.
- **Corrective**- Excision or removal of diseased body part.
- **Reconstructive**- Restore function or appearance to traumatized or malfunctioning tissues.

Types of Surgery

- **Procurement for transplant**- Removal of organs and/or tissues from a person pronounced brain death for transplantation into another person.
- **Constructive**- Restores function lost or reduced as result of congenital anomalies.
- **Cosmetic**- Performed to improve personal appearance.

Types of Surgery

- **Extent of surgery :**

Simple- Only the most overtly affected areas involved in the surgery.

Radical- Extensive surgery beyond the area obviously involved; is directed at finding a root cause.

- **Location**: Based on the area of the body on which the surgery occurs (e.g. **abdominal, heart surgery**).

Purpose of Surgery

- **Diagnostic**
 - Determine or confirm a diagnosis
(breast biopsy, bronchoscopy)
- **Cure/Curative**
 - Removal of diseased tissue, organ, or extremity (appendectomy, amputation)
- **Constructive**
 - Build tissues or organs that are absent; congenital anomalies (cleft lip repair)
- **Prevention/Preventive**
 - (e.g. removal of mole)

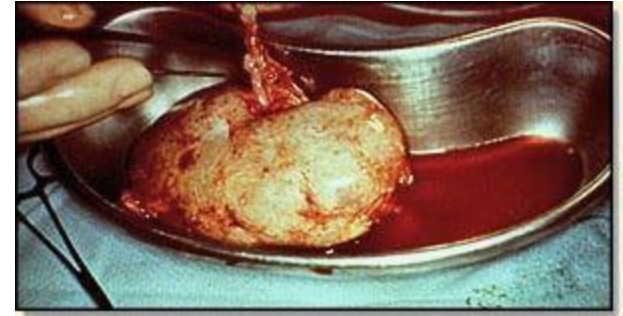


Purpose of Surgery



- **Reconstructive**
 - Rebuild tissue or organ that has been **damaged (skin graft after a burn, total joint replacement)**
- **Exploration** – Surgical examination to determine the nature or extent of a disease (**Laparotomy**)
- **Cosmetic Improvement** – (**repairing a burn scar, or changing breast shape**)

Purpose of Surgery



- **Palliative**
 - Alleviate symptoms of a disease (not curative)
(bowel resection in client with terminal cancer)
- **Transplant**
 - Replace organ or tissue to restore function
(Heart, lung, liver, kidney transplant)

Important Suffixes RT (Radiation Therapy) Surgery

- Ectomy - Excision or removal of (Appendectomy)
- Lysis – Destruction of (Electrolysis)
- Orrhaphy – Repair or suture of (Herniorrhaphy)
- Oscopy – Looking into (Endoscopy)
- Ostomy Creating of opening into (Colostomy)
- Otomy – Cutting into or incision of (Tracheotomy)
- Plasty – Repair or reconstruction of (Mammoplasty)

Surgical Setting



- Hospital
- Ambulatory surgery
 - Emergency departments
 - Doctors offices? (clinic)
 - Freestanding surgical clinics (camps)
 - Outpatient surgeries in hospitals

Types of Surgeries Performed in an Inpatient Setting

- Amputations
- Transplants
- Total Joint Replacement
- Colostomy
- Nephrectomy
- Heart Bypass Surgery
- C-sections
- Life-threatening Trauma



Types of Surgeries Performed in an Outpatient Setting

- Breast Biopsy
- Bronchoscopy
- Appendectomy?
- Removal of Skin Lesion
- Cataract Extraction?
- Cosmetic Surgery ?
- Hernia Repair ?
- Tubal Ligation
- Vasectomy
- Dilation and Curettage
- Hemorrhoidectomies ?



Minor OT?

Inpatient Surgery-Advantages

- More time for rapport
- More time to assess for risks and needs
- More time to teach
- Increased availability of:
 - Professional care and assistance
 - Treatment and diagnostic facilities
 - Medications and blood



Inpatient Setting: Disadvantages



- Higher cost
- Higher risk of hospital acquired infection
- Interruption of family routine
- Interruption of work and responsibilities
- More stressful for the patient and family

Outpatient Setting: Advantages



- Lower cost
- Less risk for hospital acquired infection
- Less interruption of family routine
- Possible reduction in time lost from work and other responsibilities
- Less physiologic stress to the patient and family

Outpatient Setting: Disadvantages

- Less time for rapport
- Less time to assess risks and needs
- Less time to teach

Common Pre-admission Directions

- Time and date of arrival
- NPO (Latin phrase “nil per os”, Nothing through mouth)
- Bowel preparation
- Valuables, jewelry
- Clothing
- Medicines