# MINOR SURGICAL PROCEDURES

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Petron


CLOSED

# COMMON MINOR SURGICAL PROCEDURES

- Incision and Drainage
- Central Venous Pressure Monitoring
- Tracheostomy
- Thoracentesis
- Pericardiocentesis
- Paracentesis abdominis

# COMMON MINOR SURGICAL PROCEDURES

- Lumbar Puncture
- Intubation of Gastro-Intestinal Tract
- Urethral Catheterization
- Circumcision
- Debridement
- Excision of Mass

# COMMON MINOR SURGICAL PROCEDURES

- **Incision and Drainage**
  - Ample or big enough to allow drainage
  - Done at dependent portion or area of pointing
  - **Indications for drainage**
    - Incomplete hemostasis
    - Incomplete removal of foreign bodies
    - Presence of divitalized tissues due to trauma, hematoma, or abscess formation
    - When in doubt- Always drain

# COMMON MINOR SURGICAL PROCEDURES

- **Incision and Drainage**
  - Technique ( Hilton' Method)
    - Asepsis and Antisepsis on operative site
    - Do field block anesthesia using procaine 1% solution
    - Using Blade 11, Puncture site at an obtuse angle directing sharp part

# COMMON MINOR SURGICAL PROCEDURES

## Incision and Drainage

- Technique ( Hilton' Method)
  - Pair of small round nose forceps inserted into opening to make it wider
  - Withdraw forceps with blades opened. Allow free passage of fluid contents to flow
  - Insert drain
  - Dressing with Sterile Gauze

# COMMON MINOR SURGICAL PROCEDURES

- Incision and Drainage for Carbuncles
  - Technique ( Bridge Incision )
    - Asepsis and Antisepsis on operative site
    - Incision of skin and subcutaneous tissue one above and one below the lesion following lines of Langer's
    - Pair of Mayo scissors inserted connecting the two incisions

# COMMON MINOR SURGICAL PROCEDURES

- Incision and Drainage for Carbuncles
  - Technique ( Bridge Incision )
    - Withdraw scissors with blades opened. Allow free passage of contents to flow
    - Insert a large rubber drain
    - Floppy Dressing with Sterile Gauze


GINEBRA

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring

- In seriously ill patients the vital problem is determination of the proper amount of fluids and blood requirements necessary to MAINTAIN an optimal blood volume in the:
  - Preoperative
  - Operative
  - Postoperative

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring
  - ☺ CVP Monitoring is a reliable procedure to evaluate properly and promptly optimal fluid and blood requirement in these patients.
  - 😐 The procedure removes much of the guess work in rapid restoration and maintenance of adequate circulation w/o fear of overloading the heart

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring (CVP)

- CVP measured anywhere in the SVC or IVC or their immediate tributaries>>>Innominate, and the Common Iliac Veins
- It is determined by a complex interaction of:
  - Blood Volume
  - Cardiac Pump Action
  - Vascular Tone
- Serves as index of circulating blood volume relative to the Cardiac Pump Action

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring (CVP)
- CVP or the pressure in the Right Atrium & adjacent Caval system will reflect ability of the Cardiac Pump Action to handle the returning blood volume at that particular time.
  - Indications:
    - When Massive blood replacement is instituted rapidly in rapid exsanguinating type of bleeding.

# COMMON MINOR SURGICAL PROCEDURES

- **Central Venous Pressure Monitoring (CVP)**
  - Indications:
  - In Acute blood volume deficit in cases operated for strangulating type of Intestinal Obstruction where rapid fluid replacement is indicated
  - In obscure cases of Shock immediately post-op whether hypovolemic due to internal bleeding or nonhypovolemic from Myocardial Infarction.

# COMMON MINOR SURGICAL PROCEDURES

## ❄ Central Venous Pressure Monitoring (CVP).

### Indications:

- In elderly patients with limited cardiac reserve undergoing difficult, time consuming operations.

- In surgical patients with anuria due to possible renal shutdown.

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring (CVP).

Basic Facts about CVP.

- Normal CVP is about 4 to 7 cm

- Low CVP 0-3 circulating blood vol. is below the normal blood volume the heart can handle.

- High CVP 8-20 (more than the heart can handle)

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring (CVP).
  - Technique

- Cannulation of the Superior Vena Cava through Basilic or Cephalic Veins.

- A polyethelene tube size French 8 and 42 inches long is inserted at the Basilic Vein just above the elbow and pushed up to 20 inches.

# COMMON MINOR SURGICAL PROCEDURES

- Central Venous Pressure Monitoring (CVP).
- Technique

- Connect an Intravenous administration set to the venous catheter through which IV fluid, may be administered.

- A Manometer is connected to IV set w/ a three way stopcock. Zero point should be at level of the Atrium or approximately at Midaxillary line.

# COMMON MINOR SURGICAL PROCEDURES

## ❄ Tracheostomy

☺ Operative opening into the trachea maintained for an indefinite period of time.

☺ Varieties:

- High Tracheostomy – Above thyroid isthmus
- Low Tracheostomy – Below thyroid isthmus; the type more commonly used.

☺ Indications;

- Comatous or Stuporous Patients due to:
- Cerebral Injuries
- Brain Infections
- Certain Cases of Brain Tumors

# COMMON MINOR SURGICAL PROCEDURES

## ❄ Tracheostomy

☺ Indications;

- Severe & Massive Injuries or Infection about the face and Neck.
- Severe Tracheo-bronchitis & other similar conditions. (Diphtheria)
- All penetrating, Lacerating, and Severe Crushing Injuries of the Trachea.

# COMMON MINOR SURGICAL PROCEDURES

- **Tracheostomy**
- Indications;

  - In Surgical procedures about Head & Neck
  - Radical Neck Dissection combined w/
  - Oral Procedure- Resection of a portion of the Mandible

# COMMON MINOR SURGICAL PROCEDURES

- **Tracheostomy**
- Indications;
- Compression of the upper Airway due to Benign and Malignant Tumors of the:
  - Larynx
  - Pharynx
  - Upper Trachea
  - Thyroid
  - Tongue
  - Mandible

# COMMON MINOR SURGICAL PROCEDURES

- Tracheostomy
- Indications;

- Post-op severely ill patients w/ ineffective cough.
- In some Post-Thyroidectomy patients

- In Severe tissue reaction and edema of the upper respiratory tract due to intense Irradiation for malignant tumors of the Neck

# COMMON MINOR SURGICAL PROCEDURES

- Tracheostomy (Technique )
  - Emergency – heroic measure for patient choking to death.
  - Neck is hyper-extended
  - Asepsis & Antisepsis on operative site
  - Under local Anesthesia a vertical skin incision is made over the Cricoid Cartilage area

# COMMON MINOR SURGICAL PROCEDURES

- Tracheostomy (Technique )
  - The thyroid isthmus w/c occupies 2nd to 4th ring is divided between clamps and secured
  - Round Windows are made on the 3rd and 4th rings
  - Specific size Cannula is inserted

    Adults size of Cannula- 10-12 mm diameter

    Children under 18 months>> 4mm in


FFC

# COMMON MINOR SURGICAL PROCEDURES

- Thoracentesis >> A minor surgical procedure where a needle is inserted at the posterior axillary line ,7th intercostal space for the purpose of tapping the pleural Cavity.

😐👍 Synonyms :

- 👍 Paracentesis Thoracis
- 👍 Thoracocentesis
- 👍 Pleurocentesis

☺👍 Indications:

- 👍 Diagnostic
- 👍 Palliative Measures
- 👍 Therapeutic
- 👍 Artificial Pneumothorax

# COMMON MINOR SURGICAL PROCEDURES

- **Thoracentesis**
  - Equipment and Supplies
    - Local Anesthetic >>> Procaine 1%
    - Anticoagulant >>> Sodium Citrate
    - Syringe, 5 and 50 cc; Needles gauge 16, 20, 25 about 3 inches long; 3 way stopcock; Forceps
    - Sterile Test Tubes for culture;
    - Sterile bottles for :
      - Specific gravity
      - Cell Count
      - Guinea pig inoculation if desired

# COMMON MINOR SURGICAL PROCEDURES

- **Thoracentesis**
  - Technique
    - Position of Patient>> Sitting w/ elevated arms supported by a pillow; If weak lateral decubitus
    - Site of Puncture>>> 6th or 7th ,posterior axillary Upper Border of the lower rib
    - Procedure( Sterile Technique)
      - Local Infiltration Anesthesia skin>> Pleura

# COMMON MINOR SURGICAL PROCEDURES

## Thoracentesis

- Procedure( Sterile Technique)
  - Attach 50 cc syringe with stopcock & gauge16 needle; slowly insert needle into preferred site of puncture until fluid can be aspirated
  - Grasp needle with mosquito forceps close to skin to make needle firm.

# COMMON MINOR SURGICAL PROCEDURES

- Thoracentesis
  - Procedure( Sterile Technique)
    - Aspirate fluid slowly into syringe and discharge to a container thru tubing connected to the stopcock.
    - After the desired amount of fluid is removed, the needle is withdrawn
    - Apply antiseptic to puncture site.
    - Apply Sterile Dressing.

# COMMON MINOR SURGICAL PROCEDURES

- Thoracentesis
- Complications:
  - Infection
  - Pneumothorax
  - Shock
  - Injury to intercostal vessels and nerves
  - Injury to Lung Parenchyma
  - Breakage of needle at puncture site


LONG BEACH PERFORMING ARTS CENTER

# COMMON MINOR SURGICAL PROCEDURES

- Pericardiocentesis
- Synonyms:
  - Paracentesis Pericardii
  - Pericardial Paracentesis
- Indications
  - Diagnostic
  - Therapeutic for serous or purulent pericardial effusion.
  - As an Emergency in Cardiac Tamponade
- Equipments and Supplies>>>Same as Thoracic Paracentesis except that an 18 gauge needle is used instead of the gauge 16 needle

# COMMON MINOR SURGICAL PROCEDURES

- Pericardiocentesis
  - Procedure (Sterile Technique is Observed)
    - Position>> Patient sitting at 60 degrees supported by back rest or pillow
    - Site of Puncture
      - 5th Left Interspace, just inside the lateral border of Cardiac Dullness
      - Left Costo-ensiform point

# COMMON MINOR SURGICAL PROCEDURES

- Pericardiocentesis
  - Procedure (Sterile Technique is Observed)
    - Actual Procedure
      - Asepsis and Antisepsis on site
      - Infiltrate the Skin and Subcutaneous Tissue with local Anesthesia
      - Connect a 50 cc syringe to a stopcock and 18 gauge needle.

# COMMON MINOR SURGICAL PROCEDURES

- Pericardiocentesis
- Actual Procedure
- If at 5th Left Interspace inside lateral border of Cardiac dullness; Insert the needle slowly at an angle directed posteriorly and towards the SPINE at the lower border of the interspace.
- If at the Left costo-ensiform point direct the needle UPWARD and to the LEFT
- Aspirate slowly and discharge fluid accordingly by a rubber tubing into a

# COMMON MINOR SURGICAL PROCEDURES

- Pericardiocentesis
  - Dangers or Complications
    - Injury to the Heart Muscle
    - Injury to the coronary and internal mammary arteries
    - Injury to the Pleura
    - Injury to the Peritoneum


WESTIN

# COMMON MINOR SURGICAL PROCEDURES

- **Paracentesis Abdominis**>> A minor surgical procedure where the abdominal Cavity is punctured or tapped

- **Synonyms** :
  - Abdominocentesis
  - Peritoneocentesis

- **Indications**:
  - Diagnostic
    - To remove fluids for examination
    - To introduce a peritoneoscope

# COMMON MINOR SURGICAL PROCEDURES

- Paracentesis Abdominis
  - Indications cont'd
    - Therapeutic
      - To Administer Therapeutic Agents
      - To introduce Air before Peritoneoscopy
    - Palliative>> To remove Ascitic fluid which may embarrass respiration
  - Equipments and Supplies>>>Same as Thoracic Paracentesis except that a Trocar with Obturator and sharp pointed scalpel are needed.

# COMMON MINOR SURGICAL PROCEDURES

- Paracentesis Abdominis
- Technique
  - Preparation of the Patient
    - Evacuate bowels using Fleet enema
    - Empty the Urinary Bladder (Catheterize)
  - Position>> Patient sitting upright on a chair or dorsal decubitus will do
  - Site of Puncture
    - Midline between Umbilicus and Pubis
    - Left side opposite McBurney's Point. Right side can also be used

# COMMON MINOR SURGICAL PROCEDURES

- Paracentesis Abdominis
  - Technique
    - Actual Procedure
      - Asepsis and antisepsis
      - Infiltrate Skin, Subcutaneous tissue and the Peritoneum with local anesthesia
      - Make a small skin incision (1/2cm ) at site
      - Grasp the Trocar and with a firm pressure introduce it through skin incision just to reach the peritoneum "DON'T HURRY"

# COMMON MINOR SURGICAL PROCEDURES

- Paracentesis Abdominis
  - Actual Procedure
    - Attach a rubber tube to the trocar. Pull out the Obturator, and collect fluid in a container.
    - After the paracentesis, apply sterile dressing and secure the area with tight Abdominal binder.
  - Complications:
    - Infection
    - Shock
    - Injury to the Abdominal Viscera


MARINA GREEN PARK
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# COMMON MINOR SURGICAL PROCEDURES

- Lumbar Puncture >> The insertion of a needle into the Subarachnoid space in the Spinal canal
- Indications
  - To obtain a specimen of the fluid for analysis and for culture
  - To establish any alteration in usual CSF pressure
  - To relieve pressure
  - To inject drugs
  - To inject dye for x-ray visualization

# COMMON MINOR SURGICAL PROCEDURES

## Lumbar Puncture

### Contraindications

- Increased intracranial Pressure due to:
  - Tumor
  - Old Hematoma
  - Brain Abscess
- Existence of a pyogenic infection and/or dermal condition in the lumbar area

# COMMON MINOR SURGICAL PROCEDURES

## Lumbar Puncture

### Technique

- Position the patient sitting on a stool with the arms and Head resting on a table; However if you wish to know something about intracranial pressure or the patency of the spinal arachnoid pathway, then patient should lay on his side, with the knees drawn up close to the head.

# COMMON MINOR SURGICAL PROCEDURES

- Lumbar Puncture
  - Technique
    - Surgeon should observe aseptic technique and left hand should rest on the iliac crest. Site is the 4th lumbar interspace.
    - The interspace w/c is approximately in the same transverse plane as the crest of the ilium is firmly palpated w/ the thumb. Skin over the area is anesthetized with 2 cc of Procaine.

# COMMON MINOR SURGICAL PROCEDURES

- Lumbar Puncture
  - Technique
    - Gauge 18 needle is introduced into the midline; If bony resistance is encountered withdraw the needle 1-2 cms & reintroduce in a modified direction.
    - As the spinal Cord is approached, move the needle forward 1cm or less at a time and the stylet is removed; When there is CSF it is reinserted.

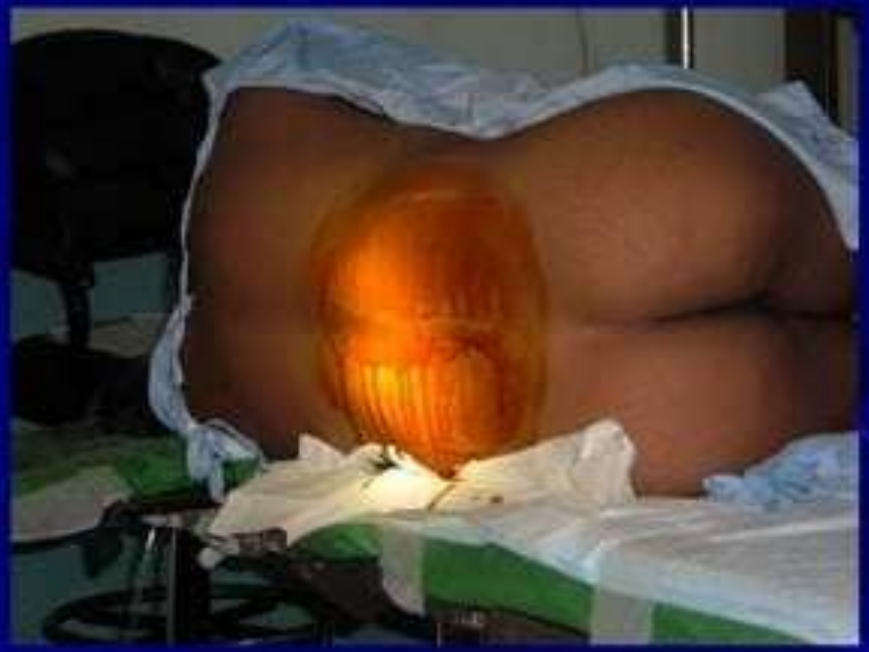
# COMMON MINOR SURGICAL PROCEDURES

## Lumbar Puncture

### Technique

- Proceed with contemplated evaluation.
- When procedure is completed, needle is removed & sterile dressing is applied.
- Place patient in dorsal recumbent position without a pillow.

# Lumbar Tap



# Lumbar Tap

# Lumbar Tap

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract
  - Indications
    - To extract gastric juice for Analysis
    - Tube feeding
    - Duodenal Drainage
    - Pre-operative decompression
    - Post-operative decompression
    - Removal of swallowed poison

# COMMON MINOR SURGICAL PROCEDURES

## ❄ Intubation of Gastro-Intestinal Tract

### ☺👍 Contraindications:

- 👍 Aneurysms especially Aortic (Retching may cause bleeding).
- 👍 Heart Failure
- 👍 Hypertension or Marked Arteriosclerosis
- 👍 Gastric Ulcer > It should be used with care

- 👍 It should not be used when Corrosive Poisons have been swallowed.

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract
  - Types of Tubes Used
    - Ewald Tube Large tube especially for gastric Analysis or Tube Feeding F 30 or larger
    - Rehfuss Tube Small oral tube with a metal "Oral tip" which helps the patient to swallow the tube and by its weight, it falls into the dependent portion of the stomach. Used for gastric juice analysis and for emptying stomach.

# COMMON MINOR SURGICAL PROCEDURES

## Intubation of Gastro-Intestinal Tract

- Levine Tube –Most used of all stomach tubes. It is a round tipped nasal catheter, size 14-16 with 4 openings at its terminal.
  - Uses:
    - To obtain gastric juice for analysis
    - For decompression
    - For Duodenal Drainage

# COMMON MINOR SURGICAL PROCEDURES

## Intubation of Gastro-Intestinal Tract

- Wangensteen Tube – A Levine type tube with lead at its end, which helps it enter into the duodenum. Has 9 openings in its terminal 10 inches.
  - Use:
    - Mainly for intestinal decompression
- Harris Tube - Modified Miller-Abbot. It has a single lumen with a thin rubber sac containing Mercury at its tip which makes its insertion much easier

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract
- Types of Tubes Used cont'd
  - Miller-Abbot Tube - size 16 F and about 2.5 meters long with double lumen. Smaller channel inflates a balloon in the tip of the tube. Inflation is done after the tube has passed the mid-portion of the duodenum. Larger Channel is for aspiration. The openings of tube are proximal and distal to balloon

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract

- Miller-Abbot Tube-
  - Uses:
    - Diagnostic
    - Decompression
    - Feeding
    - Irrigation
- Technique of Introduction
- Anatomical Points to remember
  - Ave. distance from Teeth to Cardia >>>18 inches
  - From Cardia to Pylorus 11 inches (28cms.
  - Nasal route is 2 inches( 5cm. ) longer

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract
- Other Helpful Tips
  - An emesis basin should be held by the patient
  - Psychological Reassurance
  - Retching can be controlled by active panting
  - Control Marked Pharyngeal spasm with local anesthesia
  - Use water as lubricant
  - Remove tube if the patient coughs

# COMMON MINOR SURGICAL PROCEDURES

- Intubation of Gastro-Intestinal Tract

- Technique of Introduction (Oral)
  - Keep tube in Ice-Water until insertion.
  - Push tube into Pharynx telling patient to swallow and at same time pushing 3-4 inches of tube.
  - Once the tube has been inserted at about 20 in. from the teeth aspirate to make sure that it is in stomach.

# COMMON MINOR SURGICAL PROCEDURES

## Intubation of Gastro-Intestinal Tract

- Insertion of NASAL Tubes
  - Tube is kept in water at room temperature
  - Push the tube into the nostril aiming towards the occiput until it has been felt to have turned into the pharynx.
  - Tell the patient to swallow and at the same time push 6-8 of the tube.
  - Introduce about 22 inches and aspirate

# COMMON MINOR SURGICAL PROCEDURES

- Urethral Catheterization
- Uses
  - Empty Bladder of retained Urine
  - Explore the Urethra
  - Amount of Residual Urine Determination
  - To Obtain sterile urine, especially in women
  - Measure Capacity of the Bladder
  - Measure Urinary Bladder Pressure
  - Introduce opaque materials for Cystography

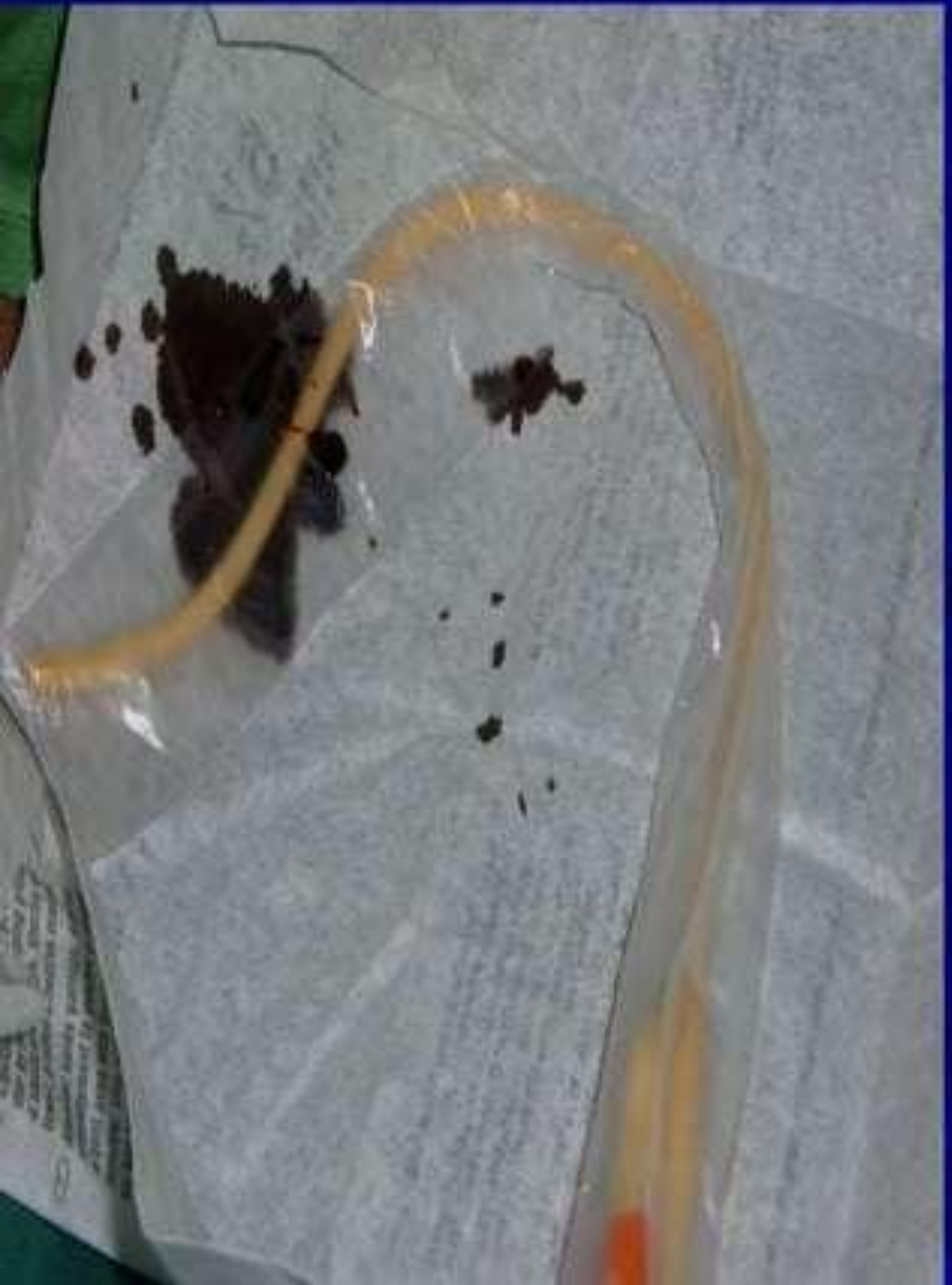
# COMMON MINOR SURGICAL PROCEDURES

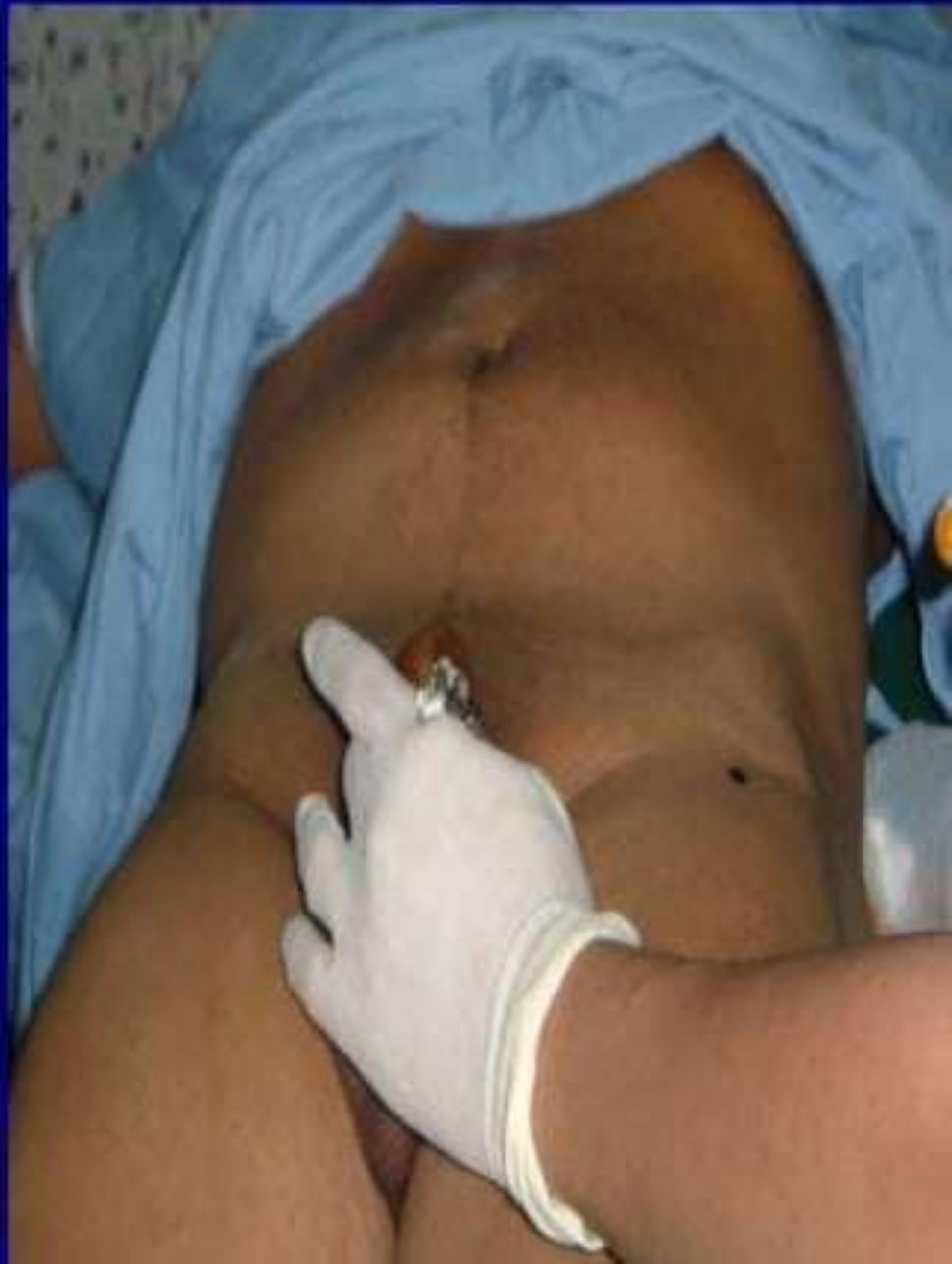
- Urethral Catheterization
- Types of Catheters
  - Soft Rubber Catheters
    - sizes from 8 F- 28 F
  - Semi-rigid Rubber Catheters
    - Solid tip Urethral Catheters>> Coudetip; Olive tip
  - Woven Catheters
  - Retention Catheters
  - Metal Catheters
  - Self Retaining Catheters

# COMMON MINOR SURGICAL PROCEDURES

- Urethral Catheterization
  - Preparing for Catheterization
    - Thorough scrubbing of the hands of the Surgeon
    - Sterile Catheter is placed on a sterile tray covered by sterile drape
    - Surgeon uses sterile gloves
    - Sterile Lubricant should be available
    - Antiseptic is used to clean Urethral Opening
    - Gentle and Gradual Insertion of the Catheter

# Urethral Catheterization





# Urethral Catheterization

# COMMON MINOR SURGICAL PROCEDURES

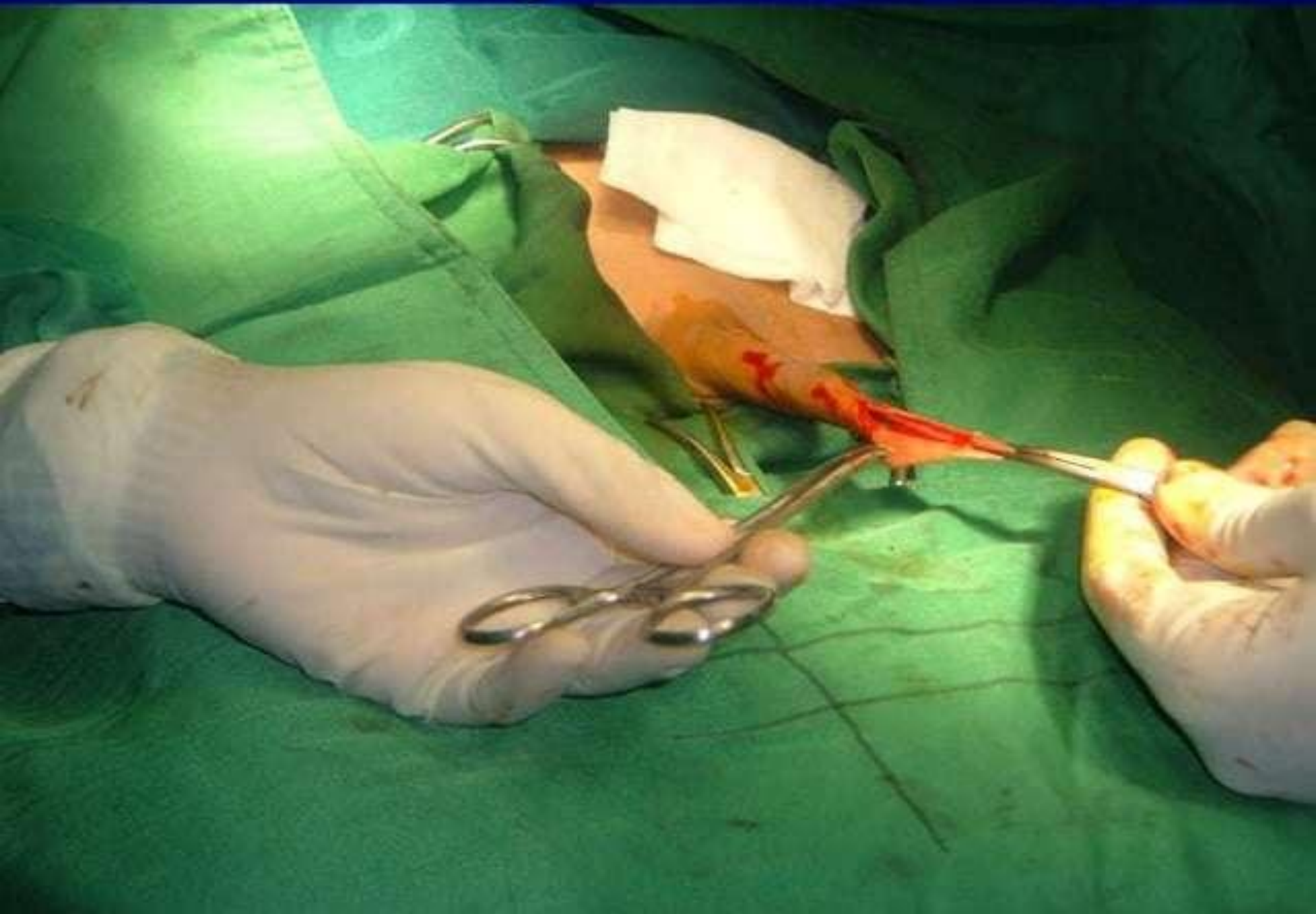
- Circumcision
- Indications
  - Congenital Phimosis
  - Paraphimosis
  - Adherent Prepuce
  - Redundant Prepuce causing Uncleanliness
  - Recurrent Attacks of Balanoposthitis
  - Dermatitis of Prepuce; Herpes & Venereal Warts
  - Ritual

# OPERATING ROOM FM CENTER

# INJECTING ANESTHESIA

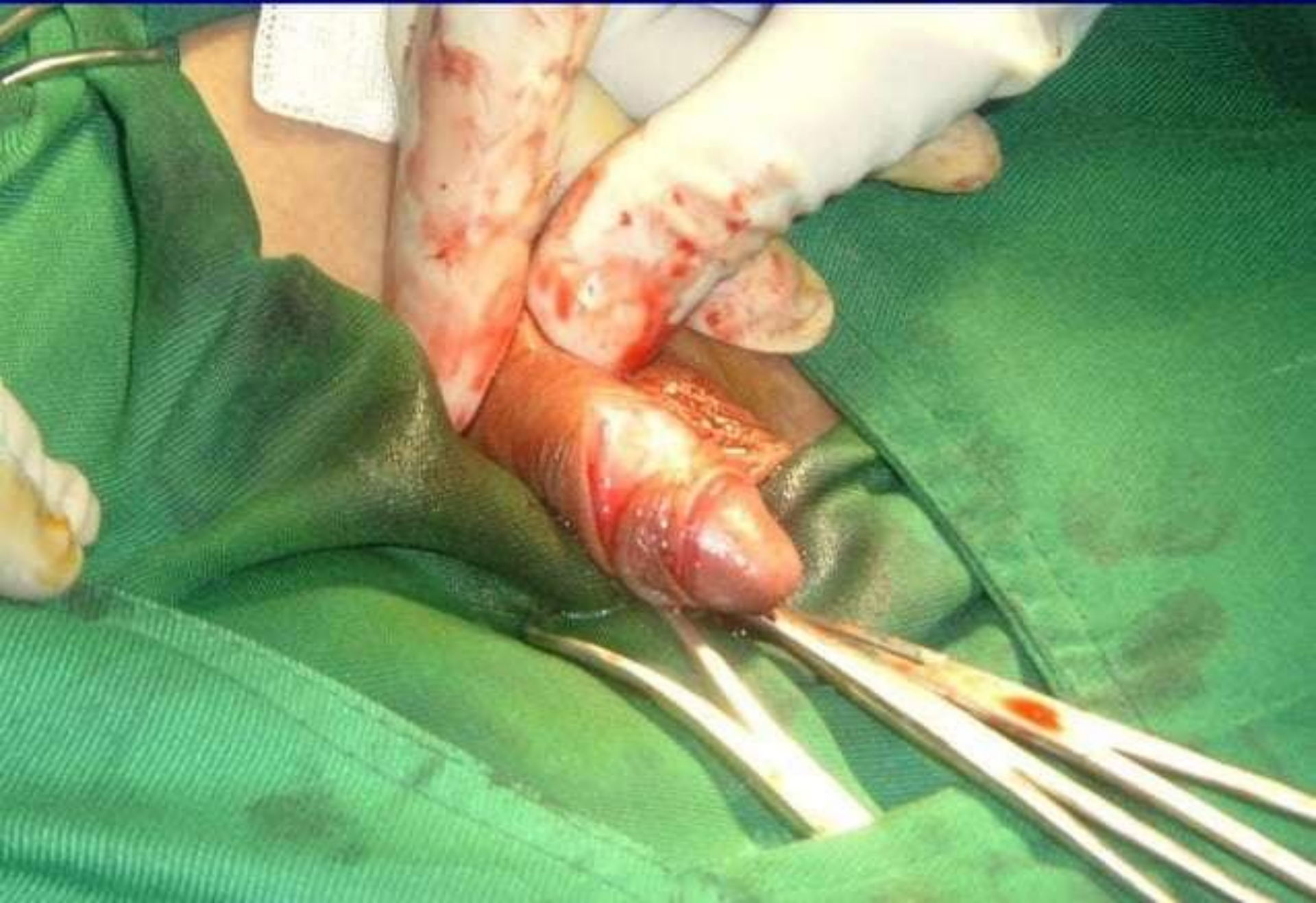
# Applying 2 forceps at tip

# Making the Dorsal Slit



# First Suture at the angle of Slit

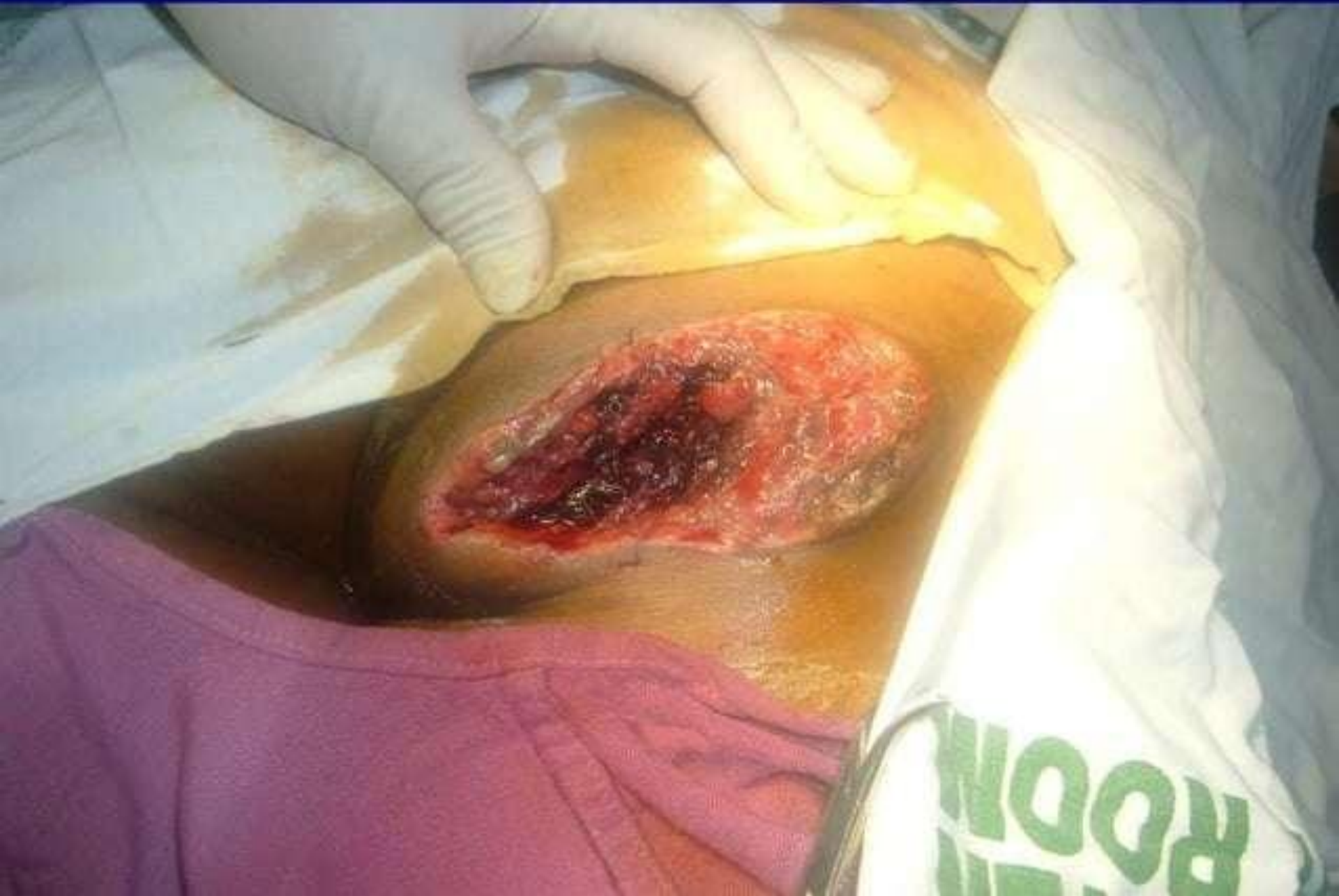
# Removing part of prepuce  on both sides



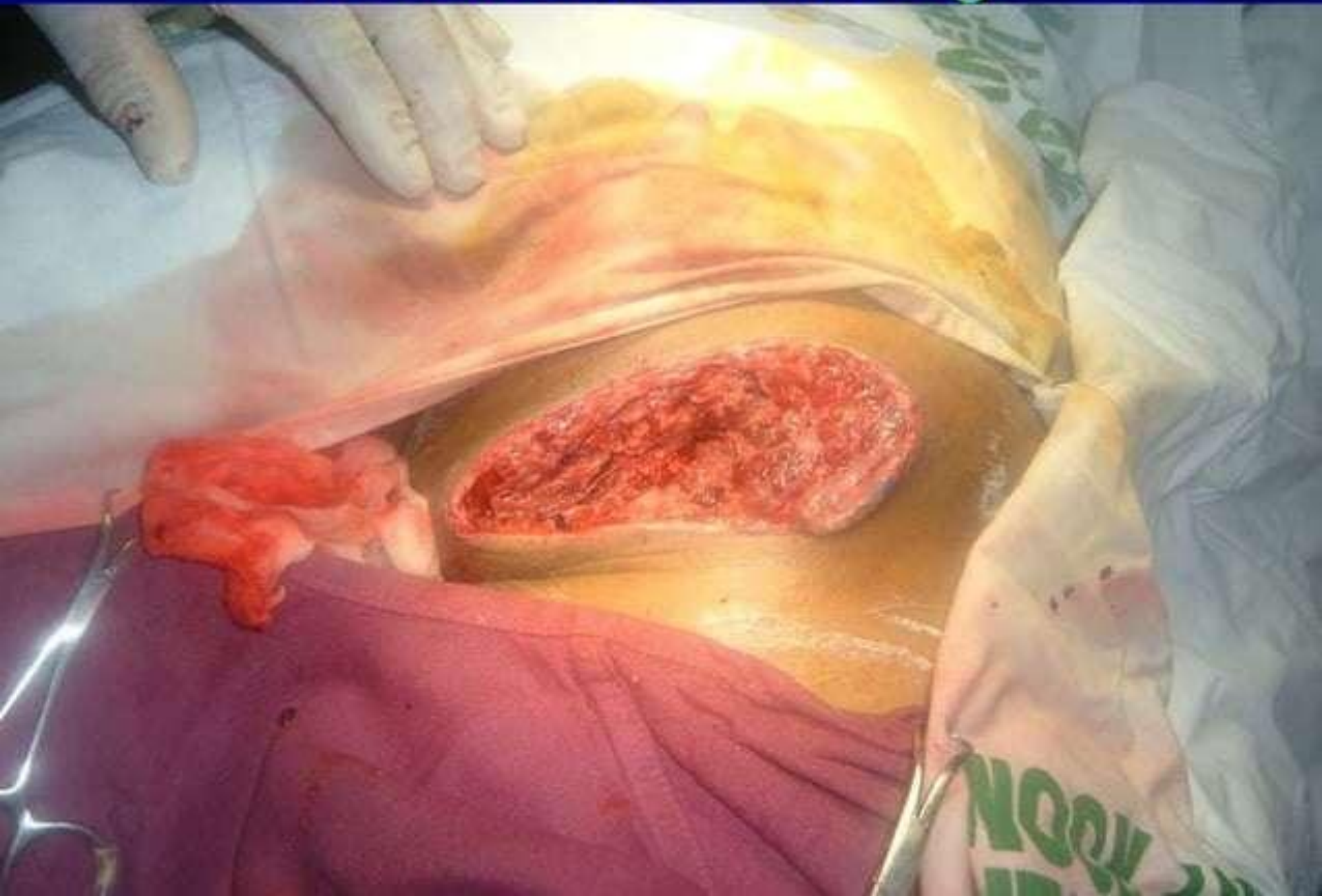
# Finished Product

# Gunshot Wound Buttocks

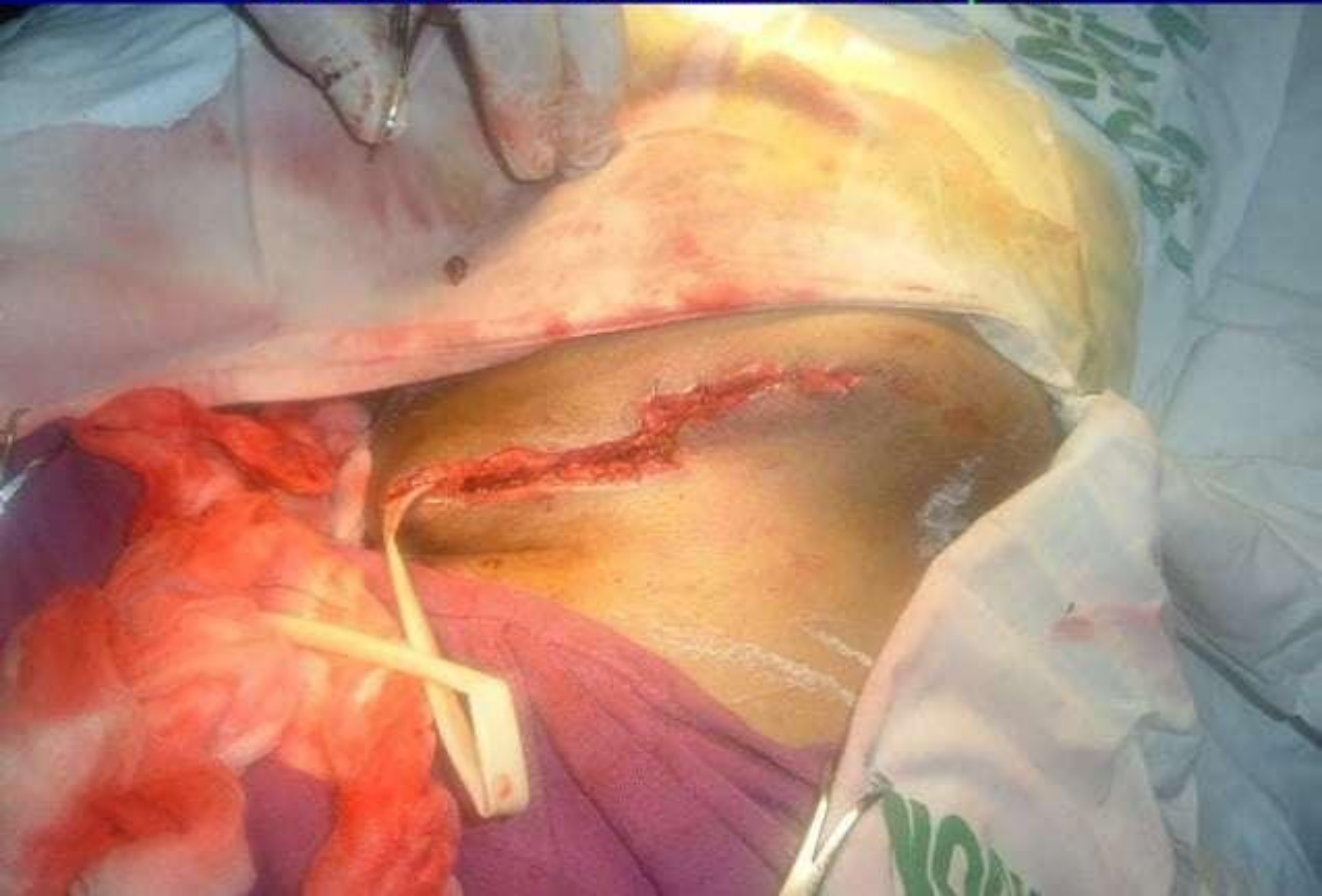
# Wound Showing Clots and Necrotic Tissue



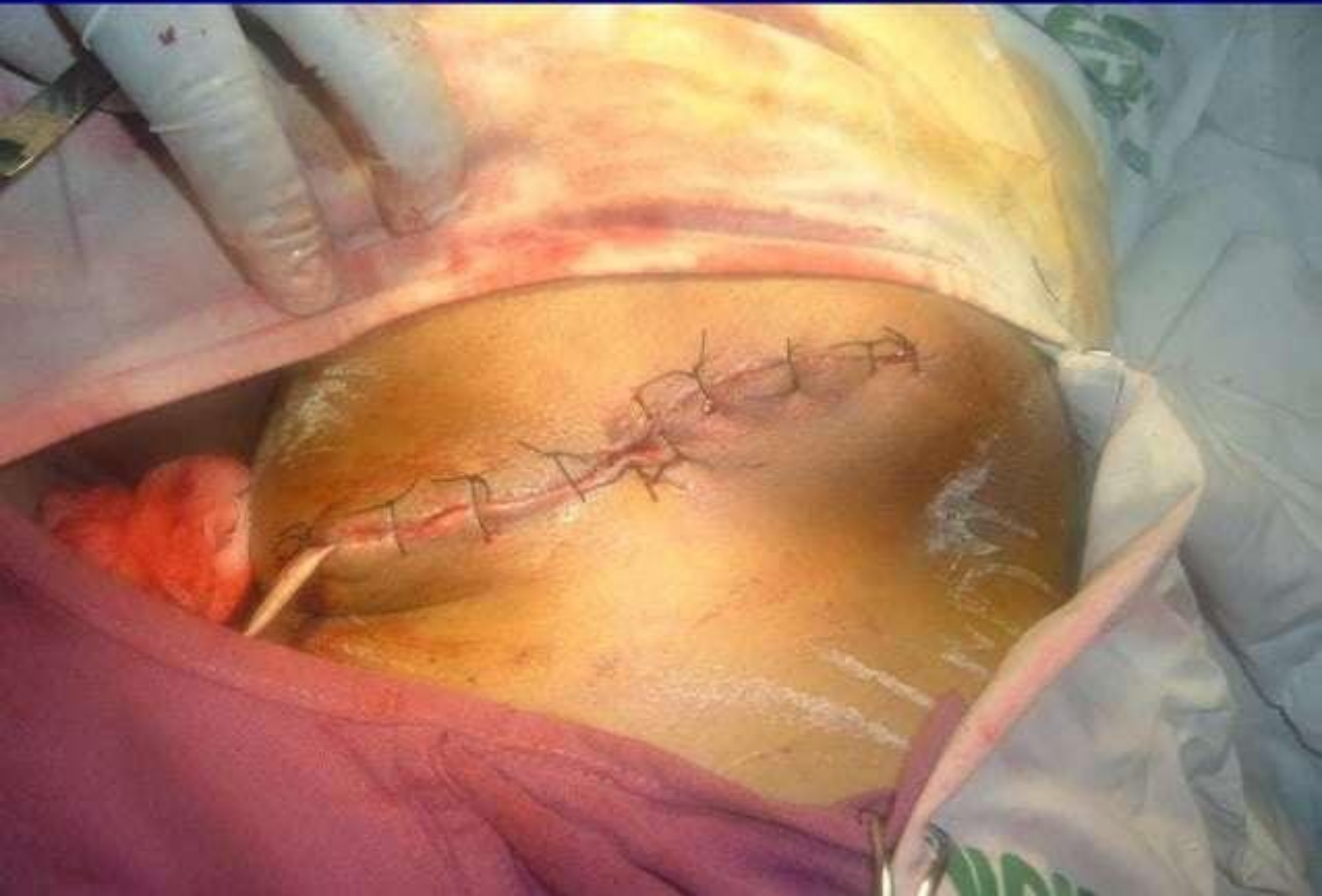
# Wound after Curettage



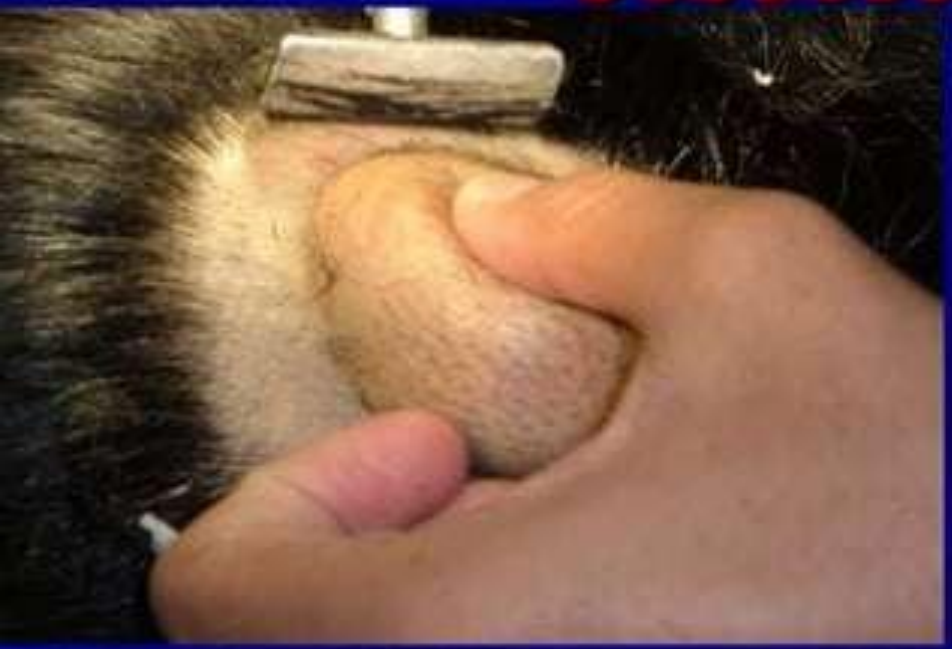
# Subcutaneous Tissue Repair

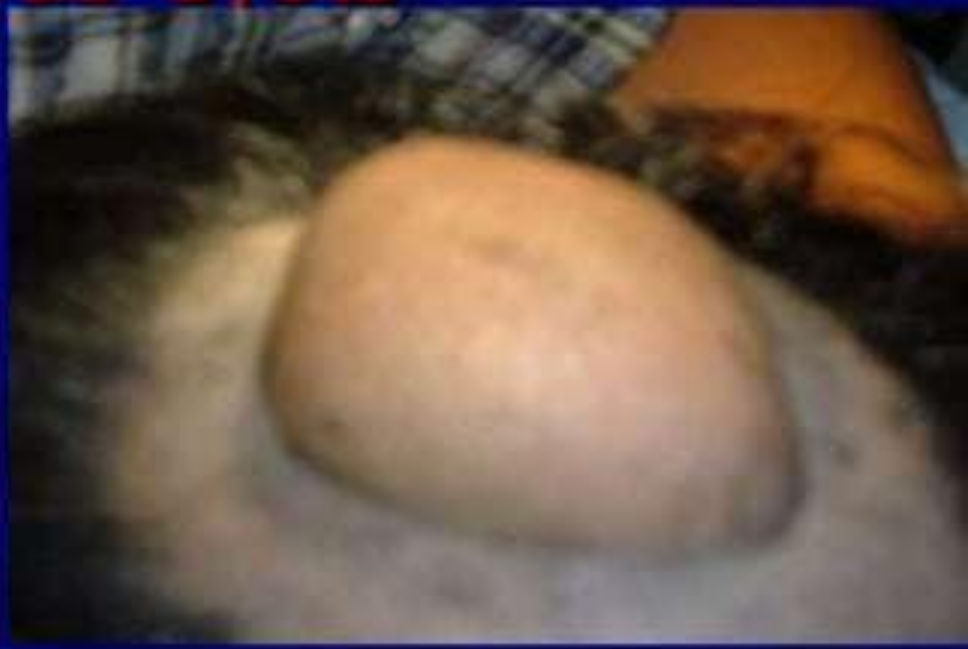


# Closure of the wound

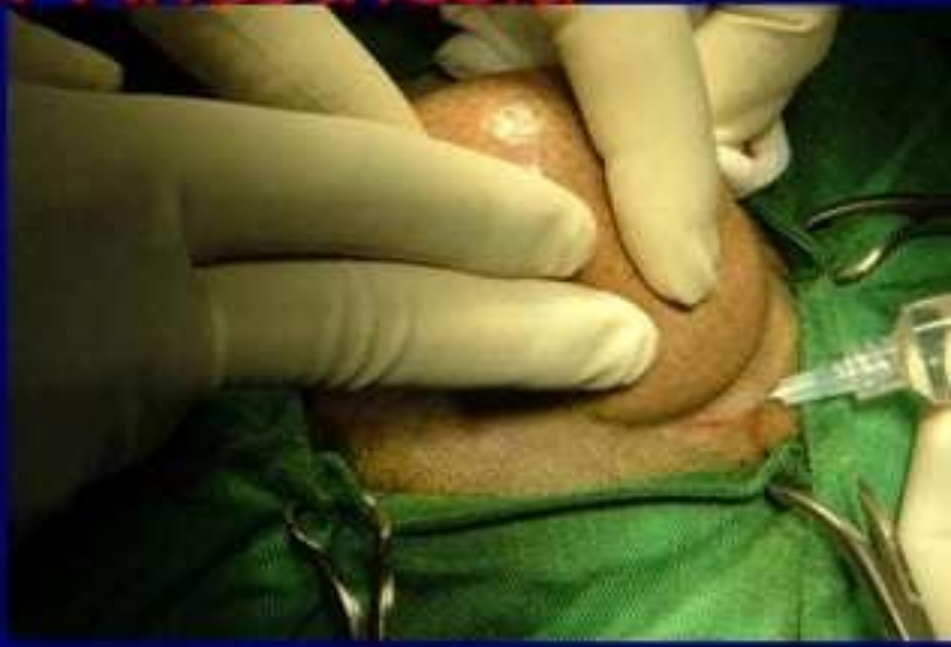


# Sebaceous Cysts

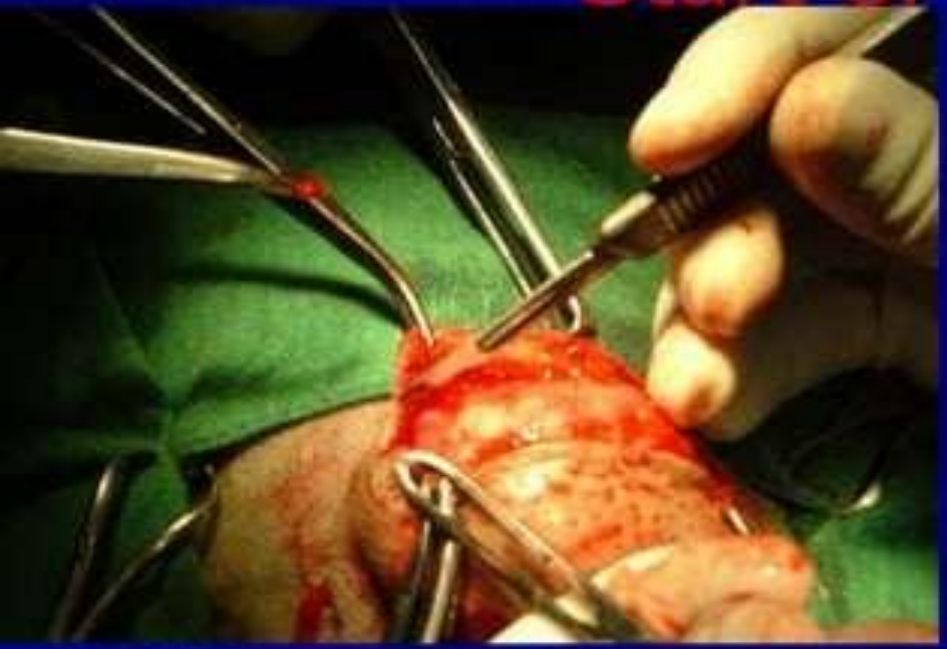


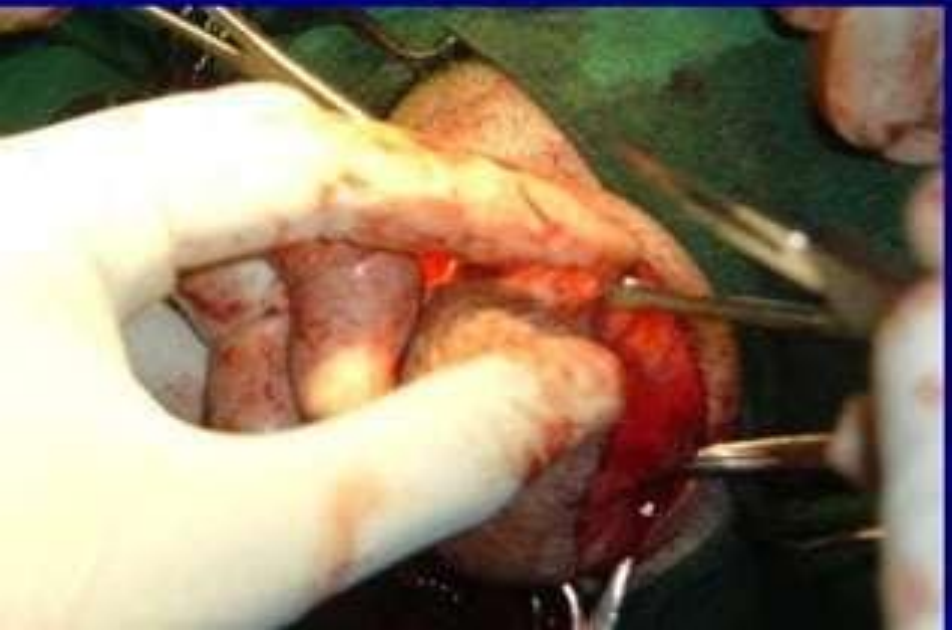


# Application of Anesthesia

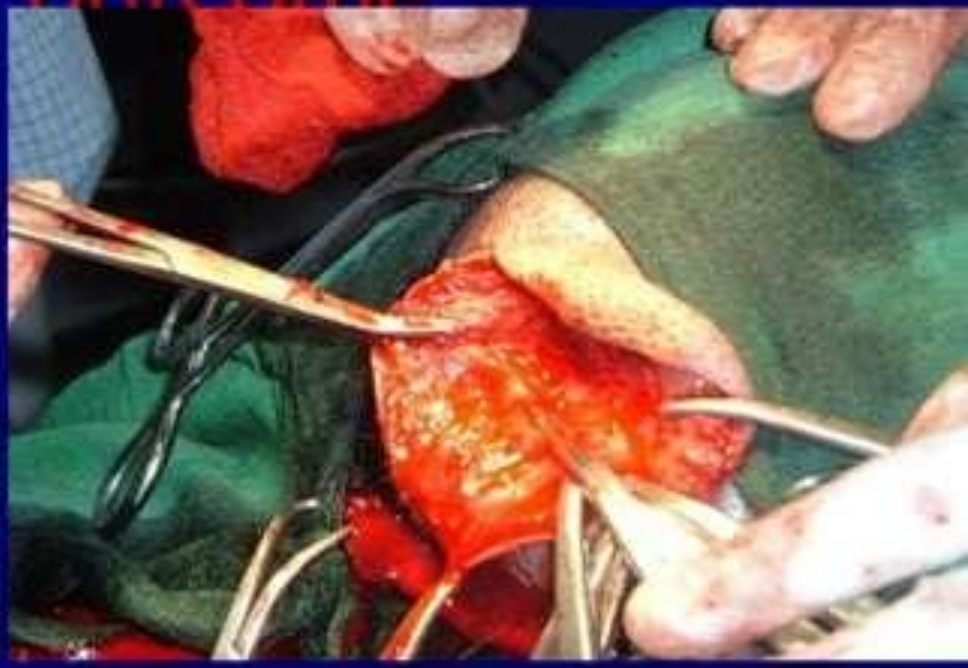


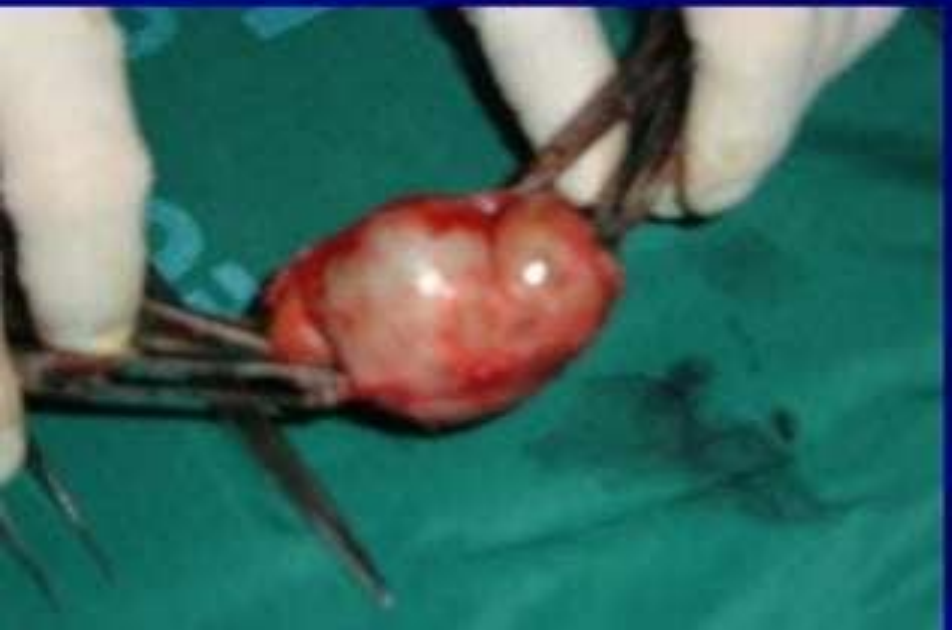
# Start of Excision



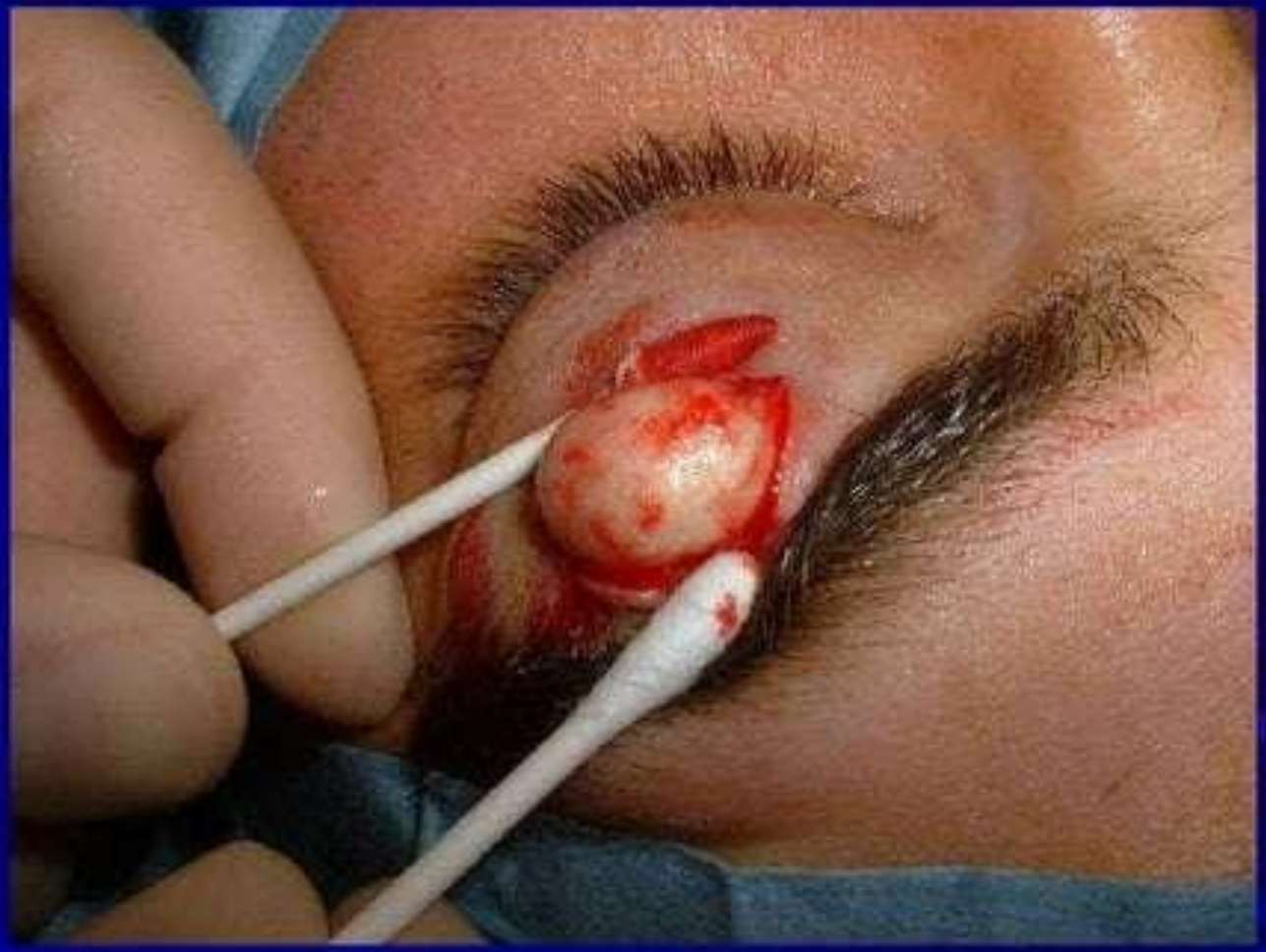


# The final outcome





# Sebacceous Cyst



# THANK YOU!!!