

Removal of Soft Tissue Foreign Body

Nature of procedure

Removal of foreign body by surgery.

An accurate history and physical examination help to identify the possibility and nature of foreign body, and the feasibility of removal at the emergency department.

Indications

1. Potential for inflammation or infection e.g. vegetative materials, teeth, soil.
2. Established infection
3. Established or anticipated toxicity e.g. spines with venom, heavy metals.
4. Persistent symptoms or functional problems e.g. persistent pain, nerve impingement or restriction of joint movement.
5. Potential for later injury e.g. intra-articular location, intravascular location.
6. Cosmetic and psychological reasons.

*Not all foreign bodies are indicated for removal. Inert objects (e.g. metal) not near vital structures can be left alone.

Intended benefits and expected outcome

1. Relief of pain and foreign body sensation.
2. Prevention / Treatment of infection.
3. Improvement in wound healing.
4. Restore functional state of the affected region.

Operative procedure

1. Foreign body removal can be time consuming.
2. Operation is done under local or regional anaesthesia.
3. X-rays or ultrasound may help to locate the foreign body, but not all foreign bodies are visible under these imagings.
4. Pressurized cuff or tourniquet may be used to obtain a bloodless field during the procedure.
5. Incision to extend / deepen the wound, or debridement of dead tissue may be needed.
6. Foreign body identification and removal.
7. Wound irrigation and closure if appropriate. (In case of infection, the wound may not be fit for closure as to avoid abscess formation)

Aftercare

1. Need of antibiotics depends on clinical decision.
2. Wound pain and swelling should be subsided in around one week.
3. Receive tetanus immunization as directed and take the analgesics / antibiotics as prescribed.
4. Wound dressing or remove wound stitches (if necessary) in GOPC as scheduled.
5. Seek help from doctor for wound related problems.

Complications

1. Wound infection
2. Bleeding
3. Retained foreign body
4. Local trauma to surrounding structures e.g. blood vessels and nerves.

* It is impossible to list out all possible complications of the procedure, here are some of the important complications which may occur.

Consequences on refusal of treatment

1. Infection, including necrotizing fasciitis
2. Persistent pain
3. Allergic reactions to foreign bodies
4. Loss of function, nerve or tendon injuries

Remarks

In cases of difficult foreign body identification, the doctor may

- Close the wound and follow-up for progress; or
- Dress the wound and admit for further treatment.

For infected wound, the doctor may choose to leave it open for daily dressing. Follow-up will be arranged for progress.