

## Introduction

Cryosurgery is a type of surgery that involves the use of extremely low temperature (between -346 and -320F) to destroy abnormal tissues, such as tumours. The surgery often involves the use of nitrogen.

## The Procedure

1. The operation can be performed under local or general anaesthesia.
2. Doctor will place liquid nitrogen on skin using a cotton swab or spray. Local medicine may be used to reduce pain or discomfort.
3. If an internal organ is being treated, doctor will use a flexible scope to put the liquid nitrogen to the targeted cells. The cell freeze, die, and then will be absorbed by body slowly.

## Preoperative Preparation

1. Admit 1 day before or on same day of this “elective” operation.
2. Anaesthetic assessment. **Inform your doctors** about drug allergy, regular medications or other medical conditions.
3. Keep fast for 6 to 8 hours before operation if general anaesthesia is required.
4. Empty bladder and change to operation clothes before transfer to operating room.
5. Pre-medication, antibiotic prophylaxis and intravenous line may be required.
6. Shaving on the operation site may be required as prescribed.

## Postoperative Instruction

### General

1. Mild throat discomfort or pain because of intubation.
2. Mild discomfort or pain over operation site. Inform nurses if more analgesics required.
3. Nausea or vomiting are common; inform nurses if symptoms severe.
4. Can mobilize and get out of bed 6 hours after procedure.

**Wound Care** You should keep the wound dry.

**Diet** Resume diet usually 4 hours after anaesthesia when taking sips of water well.

## Common Risks and Complications (not all possible complications are listed)

- Anesthesia related**
1. Cardiovascular: myocardial infarction or ischaemia, stroke, deep vein thrombosis, pulmonary embolism, etc.
  2. Respiratory: atelectasis, pneumonia, asthmatic attack, exacerbation of chronic obstructive airway disease.
  3. Allergic reaction and shock.

- Procedure related**
1. Blister
  2. Damage to the nearby healthy tissue or vessels
  3. Infection
  4. A loss of sensation if nerves are affected
  5. Slight pain or discomfort
  6. Scarring
  7. Ulcers
  8. White skin at the site of surgery

## Things to take note on discharge

1. Contact your doctor or the Accident & Emergency Department if you find increasing pain or redness around the wound and discharge from the wound.
2. Take analgesics prescribed by your doctor if required.
3. Showering is allowed but the dressing must be kept clean and dry.
4. Any follow-up consultations should be attended as scheduled.

## Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor. Evangel Hospital reserves the right to amend this leaflet without prior notice. We welcome K suggestions or enquiries on the information provided in this leaflet. Please contact our Healthcare professionals so that we could follow up and make improvement.

## References

National Library of Medicine: “Cryosurgery” (2021)  
<https://www.healthline.com/health/cryosurgery> (03-08-2023)