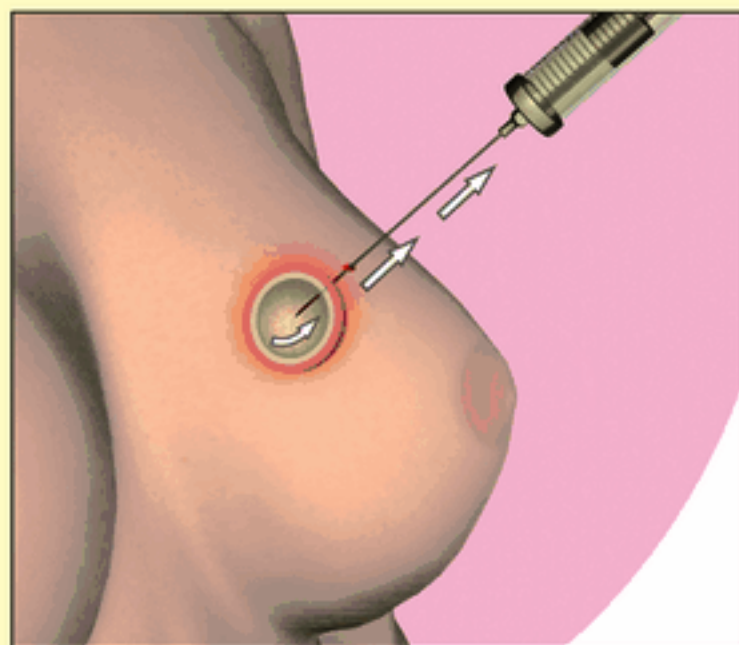


# Fine Needle Aspiration Cytology

## Introduction

Fine Needle Aspiration Cytology is performed by inserting a fine needle into the breast tumour to obtain cells for examination. It is a quick and safe manner for cytological assessment.



## Preparation before the procedure

1. Stop any anti-blood clotting drugs as instructed and avoid Chinese herbs.
2. Normal diet as usual.
3. One-piece clothing is not recommended. It is preferable to wear two pieces such as a blouse and trousers or skirt.

## Operation procedure

The procedure is suitable for most out-patients and in-patients. The doctor will insert a fine needle into the breast tumour to obtain cells for examination. The cells will be fixed and stained on glass slides for cytological examination by pathologist.

There may be some discomfort or pain. Please try to co-operate with the doctor during the examination.

## Possible complications

1. Bleeding and wound haematoma (less than 5%).
2. Wound pain or wound infection.
3. Second biopsy may be necessary if the diagnosis is not confirmed after first biopsy.

## Aftercare of the examination

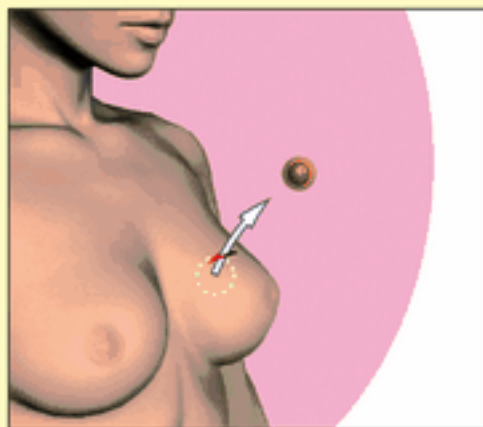
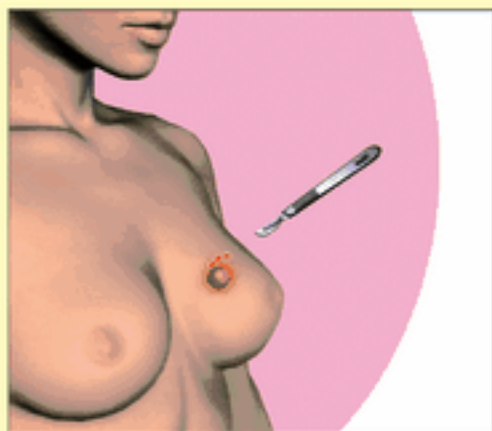
1. After needle aspiration, please apply local pressure using your hands to stop bleeding.
2. Resume normal diet after exam.
3. The bruise over the biopsy area will subside in 7 to 10 days.
4. Attend follow up appointment as scheduled.
5. If you have the following symptoms, please contact the Breast Center at **2589 8151** (office hours) or ward C3 at **2589 8341** (non-office hours):
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain

# Excision of Breast Lump

( Day Surgery )

## Introduction

The lump will be removed under general anaesthesia or local anaesthesia, and sent for pathological examination. If the lump is confirmed to be a cancer, the patient may need a second operation.



## Preparation before the procedure

1. Stop any anti-blood clotting drugs as instructed and avoid Chinese herbs.
2. Fast after midnight on the day before operation if undergoing general anaesthesia.
3. If the operation is done under local anaesthesia, fasting is not necessary.
4. Admit to hospital according to the instruction.
5. Bring all your medications to the hospital.
6. Remove nail polish and jewellery before admission.

## Operation procedure

1. Operation can be performed under general anaesthesia or local anaesthesia
2. Local anaesthesia: after injection of the local anaesthetic, the breast lump will be removed.
3. General anaesthesia: the operation takes approximately one hour, but the patient may be required to stay in the theatre for observation after operation, and the duration varies according to individual condition.

## Possible complications

1. Wound bleeding or wound haematoma (less than 5%), which may need surgical evacuation.
2. Wound infection or wound pain.
3. If the lump is confirmed to be a cancer, then further surgery will be necessary.
4. If the lump is fairly large there may be some breast deformity.

5. Allergic reaction to anaesthetic agents.

## Aftercare of the operation

1. Normal diet and activity can be resumed on the day of operation according to instruction. You can be discharged home on the same day if your condition is stable.
2. The dressing of the main wound can be removed 7 to 10 days after the operation. If the dressing becomes detached or there is oozing of fluid, you are advised to have the wound redressed in the outpatient clinic. Please maintain good personal hygiene to facilitate wound healing.
3. There is no need to have the stitches removed. Please tell the doctor or nurse if there is a stitch protruding from the wound.
4. There is chance of pain in the operation site of the breast. Pain killers can be taken as necessary.

## Discharge advice

1. Attend follow up appointment as scheduled.
2. If you have the following symptoms, please contact the Breast Centre at **2589 8151 (office hours)** or ward C3 at **2589 8341 (non-office hours)**:
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain



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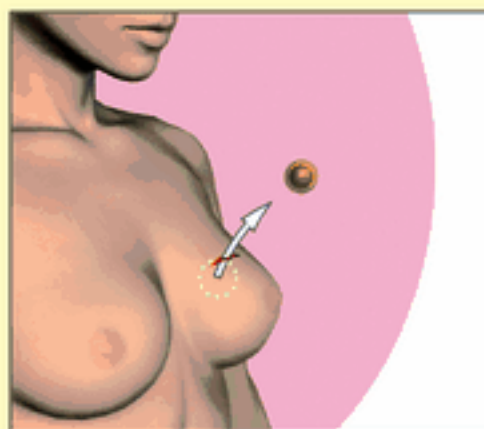
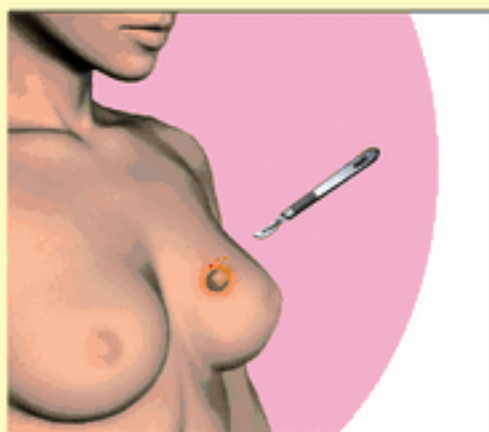
Illustrations by [www.monkeydraw.com](http://www.monkeydraw.com), Ocirne Productions Ltd

# Excision of Breast Lump

( In-patient )

## Introduction

The lump will be removed under general anaesthesia, and sent for pathological examination. If the lump is confirmed to be a cancer, the patient may need a second operation.



## Preparation before the procedure

1. Stop any anti-blood clotting drugs as instructed and avoid Chinese herbs.
2. Fast after midnight on the day before operation in preparation for general anaesthesia.
3. Admit to hospital according to the instruction.
4. Bring all your medications to the hospital.
5. Remove nail polish and jewellery before admission.

## Operation procedure

1. Operation is performed under general anaesthesia.
2. The operation takes approximately one hour, but the patient may be required to stay in the theatre for observation after operation, and the duration varies according to individual condition.

## Possible complications

1. Wound bleeding or wound haematoma (less than 5%), which may need surgical evacuation.
2. Wound infection or wound pain.
3. If the lump is confirmed to be a cancer, then further surgery will be necessary.
4. If the lump is fairly large there may be some breast deformity.
5. Allergic reaction to anaesthetic agents.

## Aftercare of the operation

1. Normal diet and activity can be resumed on the day of operation according to instruction. You can be discharged home on the second day after operation if your condition is stable.
2. The dressing of the main wound can be removed 7 to 10 days after the operation. If the dressing becomes detached or there is oozing of fluid, you are advised to have the wound redressed in the outpatient clinic. Please maintain good personal hygiene to facilitate wound healing.
3. There is no need to have the stitches removed. Please tell the doctor or nurse if there is a stitch protruding from the wound.
4. There is chance of pain in the operation site of the breast. Pain killers can be taken as necessary.

## Discharge advice

1. Attend follow up appointment as scheduled.
2. If you have the following symptoms, please contact the Breast Centre at **2589 8151 (office hours)** or ward C3 at **2589 8341 (non-office hours)**:
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain



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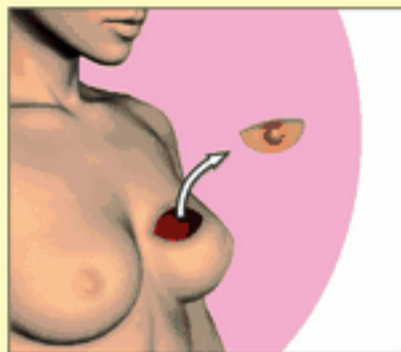
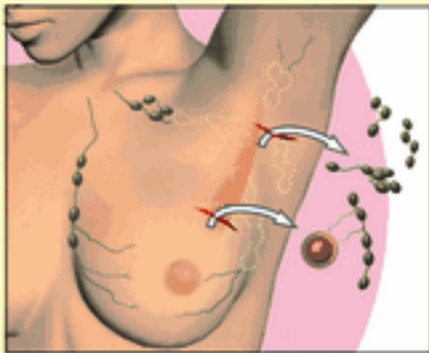
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# Breast Conserving Surgery

## Introduction

Breast conserving surgery is one of the surgeries for the treatment of breast cancer. The surgeon will remove the cancer and some normal tissue that surrounds it and perform sentinel lymph node biopsy and/or axillary dissection at the same time. If the resection margin is close to or is involved by cancer, the patient will receive a second operation of re-excision of the margin or mastectomy. All patients should receive radiotherapy shortly after breast conserving surgery unless contraindicated.



## Indication

Presence of one tumour and size of tumour small enough to give good cosmetic result (in general tumour less than 2 cm)

## Contraindications

1. Prior radiotherapy to the affected breast
2. More than one cancer in the same breast
3. Cancer larger than 2cm (relatively contraindication, depending on breast size)
4. Remaining cancer in the breast after several attempts of breast conserving surgery
5. People suffering from Systemic Lupus Erythematosus (SLE) or vasculitis
6. Pregnant women

## Preparation before operation

1. Stop any anti-blood clotting medication as instructed and avoid Chinese herbs.
2. Fast after midnight on the day before operation in preparation for general anaesthesia.
3. Admit to hospital according to the instruction.
4. Bring all your medications to the hospital.
5. Remove nail polish and jewellery before admission.

## Operation procedure

1. The operation is performed under general anaesthesia.
2. The surgeon will remove the cancer and some normal tissue that surrounds it.
3. The operation takes approximately one to two hours, but the patient may be required to stay in the theatre for observation after the operation, and the duration varies according to individual condition.

## Possible complications

1. Wound infection, bleeding or haematoma (less than 5%), which may need surgical evacuation.

2. Numbness in the operation site (18-30%), which usually subsides after a period of time.
3. If there is cancer involvement of the margin after surgery, a second operation will be necessary.
4. Breast deformity particularly in patients with large cancer.

## Aftercare of the operation

1. Normal diet and activity can be resumed on the day of the operation according to instruction. You can be discharged home one or two days after the operation if your condition is stable.
2. The dressing of the main wound can be removed 7 to 10 days after the operation. If the dressing becomes detached or there is oozing of fluid, you are advised to have the wound redressed in the outpatient clinic. Please maintain good personal hygiene to facilitate wound healing.
3. There is no need to have the stitches removed. Please tell the doctor or nurse if there is a stitch protruding from the wound.
4. There is a chance of having pain in the operation site of the breast. Pain killers can be taken as necessary.

## Discharge advice

1. Attend follow up appointment as scheduled.
2. If you have the following symptoms, please contact the Breast Centre at **2589 8151 (office hours)** or ward C3 at **2589 8341 (non-office hours)**:
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain



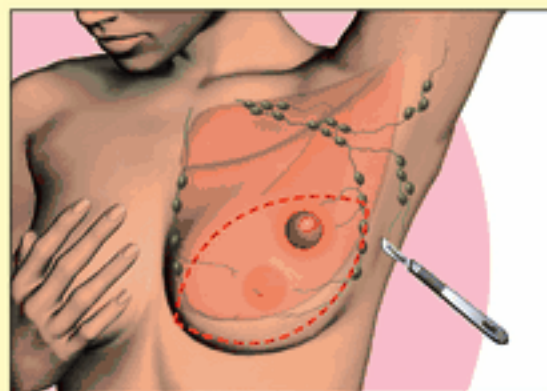
# Simple Mastectomy

## Introduction

Simple Mastectomy is the surgical removal of the whole breast without removal of the axillary lymph nodes. It is one of the operative treatments to remove breast cancer.

## Indication

In-situ breast cancer that is not considered suitable for breast conservation surgery. Under special circumstances, it can be performed as a prophylactic treatment for high risk breast cancer patients. e.g. BRCA gene carrier.



## Preparation before operation

1. Stop any anti-blood clotting drugs as instructed and avoid Chinese herbs.
2. Fast after midnight on the day before the operation in preparation for general anaesthesia.
3. Admit to hospital according to the instruction.
4. Bring all your medications to the hospital.
5. Remove nail polish and jewellery before admission.

## Operation procedure

1. The operation is performed under general anaesthesia.
2. The breast wound will be about 6-8 inches long, from chest to the axilla. A drain is inserted at the wound site, which is connected to a vacuum bottle. This decreases fluid accumulation in the wound.
3. The operation takes approximately one to two hours, but the patient may be required to stay in the theatre for observation after the operation, and the duration varies according to individual condition.

## Possible complications

1. Wound infection, bleeding, haematoma or flap necrosis (less than 5%).
2. Numbness and tingling sensation over the operated wound (18-30%).

## Aftercare of the operation

1. Normal diet and activity can be resumed on the day of the operation according to instruction. You can be discharged home one or two days after operation if your condition is stable.
2. A drain will be inserted at the wound site and it is usually kept for one to two weeks. The nurse will instruct you how to take care of the drain before discharge. You will be asked to come back to the breast centre for wound and drain care by the breast nurse.
3. The dressing of the main wound can be removed 7 to 10 days after the operation. If the dressing

becomes detached or there is oozing of fluid, you are advised to have the wound redressed in the outpatient clinic. Please maintain good personal hygiene to facilitate wound healing.

4. There is no need to have the stitches removed. Please tell the doctor or nurse if there is a stitch protruding from the wound.
5. There may be numbness and tingling sensation over the breast wound. The sensation will recover for most people after a period of time.
6. Pain killers can be taken as necessary. Please inform the doctor or nurse if you feel sudden severe pain.
7. Prosthesis fitting: temporary prosthesis can be worn after the wound has healed while the permanent prosthesis can be worn after 6 -8 weeks. It can balance your body so that back & neck pain can be avoided. And it also improves the body image.
8. Sex life: you can resume your sex life after the wound has healed. Share your feelings and anxiety. Good communication can help you to recover and remember sexual intercourse will not transmit cancer to your partner. Contact your nurse if you have any queries.

## Discharge advice

1. Attend follow up appointment as scheduled.
2. If you have the following symptoms, please contact the Breast Centre at **2589 8151 (office hours)** or ward C3 at **2589 8341 (non-office hours)**:
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain
  - Lost of vacuum of the drain
  - Drain fluid less than 30ml in two consecutive days



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# Breast Reconstruction Surgery

## Introduction

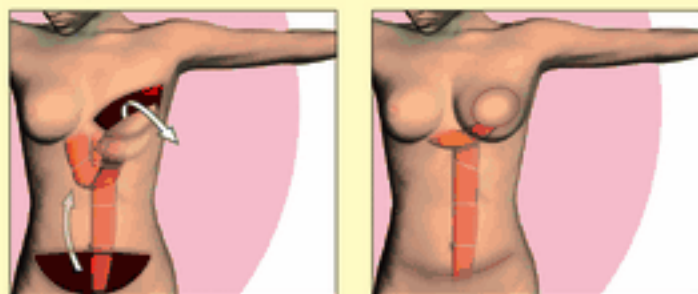
Breast reconstruction is the rebuilding of a breast in women after mastectomy. This procedure involves the use of implants or patient's own tissue to construct a natural-looking breast. This often includes the reformation of a natural-looking areola and nipple.

There are many methods for breast reconstruction. The two most common are:

### 1. Breast implant



### 2. Flap reconstruction



### 1. Breast implant

Two commonly used implants are

- (i) silicone devices filled with silicone
- (ii) silicone devices filled with salt water (saline)

#### Advantage :

- Relatively simple and short procedure

#### Disadvantages:

- Radiation therapy following implant insertion may cause complication.
- The shape of the reconstructed breast may not look or feel natural.
- Capsular contracture (hardening of the area around the implant)
- Migration of silicone gel

### 2. Flap reconstruction

**Autologous tissue:** Tissue to be taken from other parts of the patient's body, such as the back, buttocks, thigh or abdomen.

- (i) The latissimus dorsi (LD) muscle flap taken from the back.
- (ii) Transverse Rectus Abdominis Myocutaneous (TRAM) flap taken from abdominal wall.
- (iii) Deep Inferior Epigastric Perforator Flap (DIEP) flap taken from abdominal wall.

#### Advantage:

- Patients can receive radiation therapy after reconstruction surgery.
- Autologous tissue can feel, look, and move like a real breast.

#### Disadvantages:

- The surgery is longer and more complex.
- Recovery takes longer.
- Removal of tissue from the flap donor site creates scars.

The choice of different types of reconstruction surgery depends on several factors:

1. Degree of laxity of the chest wall skin flap after mastectomy.

2. Thickness of the chest wall skin flap.
3. Whether future pregnancy is expected.
4. Whether the pectoralis major, pectoralis minor and serratus anterior muscles are preserved after mastectomy.
5. Size of the contra-lateral breast.
6. Size of the autologous tissue.

### Timing for breast reconstruction

Breast reconstruction can be done at the same time as the mastectomy surgery ("immediate") or some time after the surgery ("delayed").

#### Advantages of immediate reconstruction

1. Immediate reconstruction is less complex than delayed reconstruction.
2. Patient can be spared from multiple operations and general anesthesia.
3. Patient does not have to go through the period when she does not have a breast at all. Immediate reconstruction helps patient to restore confidence in her sexuality.

#### Advantages of delayed reconstruction

Patient has more time to have thorough discussion with the plastic surgeon and make the decision whether to have breast reconstruction or not.

\*\* Not all women are candidates for immediate reconstruction. Possible adjuvant treatment has to be taken into account when making decision on timing of breast reconstruction. It is important for a woman to discuss her options with her breast surgeon, her oncologist and her plastic surgeon. It is also important to note that breast reconstruction after a mastectomy usually cannot create a perfectly natural-looking breast. Although implants and tissue-based reconstruction can both create a more symmetrical and proportionate bust line, neither procedure can produce flawless results. For this reason, it is crucial that a patient approach breast reconstruction surgery using implants with realistic expectations.



## ***Nipple-Areola Reconstruction***

The nipple and areola are usually the last stage of breast reconstruction. The nipple can be recreated with tissue from the reconstructed breast itself after the skin on the breast has healed. The areola may also be created by tattooing the area or by grafting skin from the groin area.

### ***Preparation before operation***

1. Psychological preparation: patients are advised to discuss their wishes with family members, surgeons, nurses and social workers before their decision.
2. Stop smoking: smoking increases the risk of complications for all types of breast reconstructive surgery.
3. Stop any anti-blood clotting drugs as instructed and avoid Chinese herbs.
4. Fast after midnight on the day before operation in preparation for general anaesthesia.
5. Admit to hospital according to the instruction.
6. Bring all your medications to the hospital.
7. Remove nail polish and jewellery before admission.

### ***Operation procedure***

The operation is under general anesthesia and will last for 6-8 hours, but the patient may be required to stay in the theatre for observation after the operation, and the duration varies according to individual condition.

### ***Possible complications***

1. Wound infection, bleeding, haematoma and fluid collection.
2. Tingling or numbness over the operated wound.
3. Flap necrosis, loss of flap.
4. Blood vessels and nerve injury.
5. Numbness and pain over axillary area and affected arm (9 - 30 %).
6. Lymphoedema of the affected side of the arm (6 - 30 %).
7. Stiffness of affected side's shoulder (8 -18 %).

## ***Aftercare of the operation***

1. Patient needs bed rest for 5 to 7 days after operation.
2. Particular attention should be paid to the new flap. Avoid pressure to the new flap. Wearing of loose clothing and the use of light quilt is encouraged. Nurses will monitor the color, capillary refill, and temperature every hour for the new flap.
3. Multiple drains will be inserted and the drains will be removed 7-10 days after the operation. Special precaution is needed during mobilization on the bed.
4. Normal diet can be resumed after the operation.
5. Mobilization is encouraged when the condition of the new flap is stable. It is advised to have your family members to accompany you during early mobilization after operation.
6. If TRAM flap reconstruction is performed, do not extend the body and sit with hips and knees slightly bent during ambulation in the first week, to prevent abdominal wound dehiscence.
7. Wound care: Over the breast wound, abdominal wound and back wound, small pieces of special adhesive tape (Steril Strips) are applied to pull the edges of the wound together, which need to be kept clean and dry. The Steril Strips will come off naturally or can be gently removed in 12 days. TRAM flap patients with umbilical wound should use sterile saline solution to clean the wound daily and apply the antibiotic ointment as directed. Please maintain good personal hygiene to facilitate wound healing.
8. Exercise: Avoid overhead lifting, strenuous sports for two months following reconstructive surgery except regular arm exercise as directed. However, most women can resume normal activity levels within six weeks.
9. Keep the wound dry and covered with a clean dressing until the stitches are removed. If there are stitches protruding from the wound, please inform the surgeon or nurse.

10. There may be numbness and tingling sensation near the inner mar and the reconstructed breast which will last for a few months. Avoid using hot pad in these areas until the sensation returns normal.
11. Pain killers can be taken as necessary. Please inform the doctor or nurse if you feel sudden severe pain.
- 12.. Avoid intravenous injection, blood taking and blood pressure measurement on the affected arm. Avoid scratch and cut on the affected arm. Avoid lifting heavy objects and wearing tight jewellery. These measures prevent the development of cellulitis. Remember to perform regular arm exercise under the supervision of your physiotherapist.
13. Sex life: you can resume your sex life after the wound has healed. Share your feelings and anxiety. Good communication can help you to recover and remember sexual intercourse will not transmit cancer to your partner. Contact your nurse if you have any queries.

### ***Discharge advice***

1. Attend follow up appointment as scheduled.
2. If you have the following symptoms, please contact the Breast Centre at **2589 8151 (office hours)** or ward C3 at **2589 8341 (non-office hours)**:
  - Fever higher than 38.5°C
  - Abnormal discharge, oozing, swelling or redness from the wound
  - Severe wound pain