Sunnybrook
HEALTH SCIENCES CENTRE

Ross Tilley Burn Centre Care Pathway

1. Arrival to the Ross Tilley Burn Centre

The majority of patients are transferred from their community hospital to the Ross Tilley Burn Centre. Depending on the distance to the burn centre, patients may arrive by ground ambulance or helicopter. Some patients referred for assessment to the burn clinic may also require admission.

Types of burns and skin conditions we treat

We treat adult patients with flame, scald, electrical, tar and chemical burns. People who have frostbite, Stevens–Johnson syndrome (SJS), or toxic epidermal necrolysis (TENS) are admitted to the burn centre as well.

Length of stay

Your stay in the burn centre depends on the severity of injury, keeping in mind the depth, size, and location of the wound; your age; and past medical history. Although it's difficult to predict how long it will take for your injury to heal, a hospital stay can vary from a few days to a few months.

Admission

Once you are admitted to the burn centre you will either be taken directly to a patient room (for minor injuries) or to the resuscitation room. During this time, family and/or visitors will be asked to wait in the visitor's lounge. Where appropriate, a member of the team will provide an update.

Resuscitation room (hydrotherapy room)

In this room, a patient is transferred from the stretcher onto a special metal table that has shower hoses overhead. This is where a patient receives a full physical examination to cleanse the wounds and assess the extent of their injuries. Other procedures, surgeries or treatment will occur as necessary.

2. Procedures and Surgeries

Procedures you may receive

Dressings
After your wounds are cleaned, dressings are applied over the burned areas. Dressings act as a protective barrier to keep the wound clean and help the healing process.

Intravenous (IV) Line
An IV line can be used to deliver medication and to replace fluids directly into your bloodstream.

Mechanical Ventilator
If you have difficulty breathing or suffered smoke inhalation or burns to the neck, you may need a machine to help you breathe (ventilate). A tube connected to the ventilator is placed through either the nose or mouth to reach your lungs.

Nasogastric (NG) Tube
An NG tube is inserted through the nose into the stomach. This tube can be used to give you food and medications.

Surgeries you may undergo
Burns are classified based on the size of the burn (how much of the body is burned) and the depth of the burn (how many layers of the skin are burned).

A superficial burn (also known as a first-degree burn) involves the top layer of skin and can usually be treated without surgery. A partial thickness burn (also known as a second-degree burn) involves the top layer of skin and part of the second layer of skin. A full thickness burn (also known as a third-degree burn) involves the first and second layer of skin and might go deeper into the tissue. A person could have a combination of different depths of burns.

Depending on the depth of the burn, the burn surgeons may need to perform common surgeries such as debridement, escharotomies, fasciotomies, or skin grafts.

Debridement

Debridement is when thin layers of dead tissue are removed from the wound. Doing this reduces the chances of developing an infection and helps the healing process. Depending on the depth of the burn, the wound may or may not require bandages or skin grafting.

Escharotomy or fasciotomy

In response to the burn injury, the body may swell, causing the skin to be tight and making it difficult for blood to circulate. To fix this, surgical incisions are required to either the burned area or another part of the body that might have swelled. These incisions are called an **escharotomy** or **fasciotomy**. An **escharotomy** is a surgical incision through the first and second layers of burned skin. A **fasciotomy** is a deeper surgical incision beyond the first and second layers of skin and into muscle. Further surgery to close the incisions might be needed.

Skin graft

Once a wound is cleaned and debrided it needs to have a protective barrier. This might involve dressings at the beginning, but deeper burns might require a **skin graft**. A **skin graft** is necessary when a wound is too large or deep to heal on its own. There are two types of skin grafts: allografting and autografting. There could be many surgeries depending on the size of the wound and healing process.

Allografting

Allografting is temporary wound coverage if the wound needs more time to heal or if there is not enough healthy tissue available. Allografting uses donated skin from deceased donors (cadaver skin) through organ donation and acts as a protective barrier until your own skin can be used.

Autografting

Autografting is when your own healthy skin is taken in a thin layer from other areas of your body (known as a donor site) and applied onto the wound. This can be done in one step if the wound is ready or done as a second step to replace the temporary wound coverage (allograft). Your own skin is required to close your wounds.

3. Treatment

Counselling/support

The social worker is available to provide counselling and emotional support. Assistance in coping with any difficult or stressful issues is also available. The social worker also helps with practical problems, such as financial assistance, accommodation information, and hospital insurance.

The social worker can also arrange for **peer support**. With peer support, a burn survivor can be available to answer questions and offer advice on how to live with and care for a burn injury.

Diet

Good nutrition helps healing. The dietitian orders a high-calorie, high-protein diet and monitors nutritional intake to ensure you are eating enough food.

Pain medication

Since the majority of burn patients experience some degree of discomfort, medication is given frequently to decrease the pain. Medication is given before physiotherapy, dressing changes, and whenever necessary.

Rehabilitation

An essential part of recovery is rehabilitation. Rehabilitation starts early in the hospital stay to keep your functional ability and range of movement. Patients will work with occupational therapists, physiotherapists and physiatrists. The goal of rehabilitation is to help you become more physically independent and to improve quality of life.

4. Leaving Sunnybrook

When your specialized care is complete, the burn centre team will speak with you about leaving Sunnybrook. This may involve care in a hospital closer to home (repatriation), rehabilitation, or discharge home. If needed, follow-up appointments will be made with your primary surgeon through the burn clinic.

Care closer to home

When it is safe, and you no longer require the specialized care of the burn centre, the team will talk to you about moving (repatriating) you to a hospital closer to your home to receive further care.

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Inpatient rehabilitation

When you are ready to be discharged from the burn centre, you may require more rehabilitation. Your therapist, in consultation with you and the burn care team, might make a recommendation for inpatient rehabilitation at St. John's Rehab or another facility.

Discharge home

Depending on your recovery you may be able to be discharged directly home. As required, you will be given a prescription for medications and arrangements will be made for wound care and outpatient rehabilitation.