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Burns



What are Burns?

A type of **tissue damage** known as a burn happens when the skin is subjected to high temperatures, chemicals, electricity, or prolonged sun exposure. Even while the majority of skin burns are small and manageable at home, it's crucial to identify the warning signs of a more serious burn that needs to be attended to by a doctor because it can create consequences and usually needs to be treated right away.



What are the causes of burns?

Burns can result from a number of things, such as:

- Hot water, steam, and hot objects
- Flames
- Chemicals
- Electricity
- Too much sun exposure

What are Burns Classifications?

The severity of a burn might determine which skin thickness is affected. Over the course of the first several days, the classification may alter; a burn may start off superficially and gradually become deeper.



What are Burns Classifications?

1. **First-degree burns:** sometimes referred to as superficial skin burns, only involve the skin's outermost layer. They don't result in blisters, although they are unpleasant and red. Usually, they recover completely in three to six days. Sunburns that don't blister are one example.
2. **Second-degree Burns:** The top two layers of skin are affected, sometimes referred to as superficial partial-thickness skin burns. These burns hurt, and blisters typically form from them. Usually, they recover in seven to **21 days**. Scarring is uncommon; however, the affected area may have long-lasting color changes. Another example of this type of burn is sunburn

What are Burns Classifications?

3. **Third-degree burns:** sometimes referred to as deep partial-thickness skin burns, are defined by blister formation right away, deeper penetration into the skin, and discomfort when pressure is applied. Deep partial-thickness burns take more than 21 days to heal and can leave recognizable, sometimes severe, scars behind.
4. **Fourth-degree burns:** Full-thickness burns, penetrate all layers of skin, obliterating it entirely. It looks waxy white, leathery gray, or burned black in hue, and there's no pain. Full-thickness burns usually leave large scars and necessitate surgical intervention for recovery



What is the Treatment for Skin Burns?

Small, superficial, and partial superficial burns can be treated at home. Larger and deeper burns should be evaluated and treated by a health care provider.

Home treatment for skin burns includes cleaning the area, cooling it immediately, preventing infection, and controlling pain, which is done by the following:

1. **Clean the area:** Carefully take off any jewelry, watches, belts, shoes, and other accessories. Use mild soap and cool running tap water to gently wash the burned area. Using alcohol, iodine, or other cleansers to sterilize the skin is not essential

What is the Treatment for Skin Burns?

2. **Cool the area:** After cleaning the skin, you may apply a cold compress to the skin or soak the area in cool (not iced) water for a brief period of time to mitigate pain and reduce the extent of the burn.

Note: Ice should not be used directly to the skin as this can exacerbate existing skin damage.

3. **Prevent infection:** Apply aloe vera or an antibiotic moisturizer to the burned region to help prevent infection in cases of partial-thickness and more serious burns. Avoid applying other materials to burns on your skin, such as mustard, egg whites, lavender oil, butter, mayonnaise, or toothpaste.



What is the Treatment for Skin Burns?

Blister-forming burns should be wrapped with a clean bandage, ideally one that is non-sticking (such as Vaseline dressings or non-stick bandages) If necessary, minor burns can be wrapped with a clean bandage.

Change the bandage once or twice a day; avoid using a needle to pry open blisters on the skin as this might lead to an infection.

4. **Tetanus prevention:** You require a tetanus booster shot if you haven't received one in the previous five years and your burn is deeper or superficial partial-thickness.



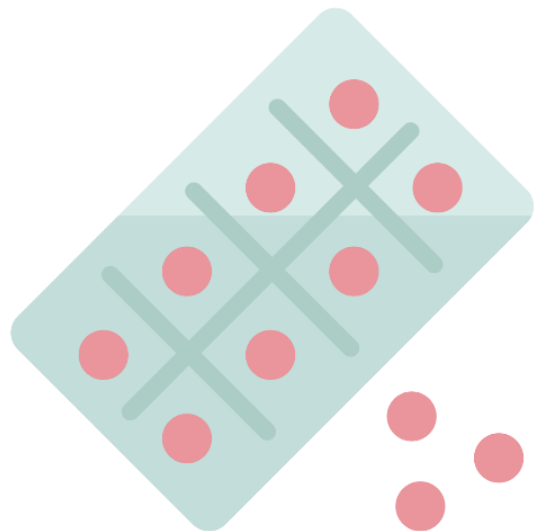
What is the Treatment for Skin Burns?

5. **Treat pain:** Burns on the hand or foot may be treated by raising them above the level of the heart to reduce swelling and pain. If necessary, you can take an acetaminophen or ibuprofen-type pain reliever. Local anesthetics should not be used regularly on burns; because it causes skin irritation. If the burn is severe, or the pain is not relieved by previous medications, you should consult a doctor.



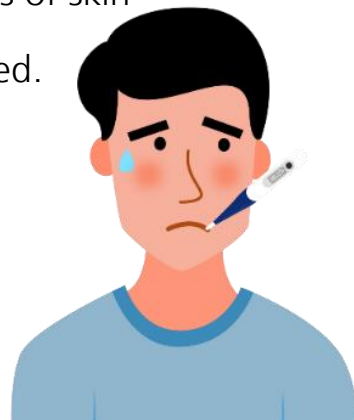
How to treat skin Burns?

6. **Avoid scratching the skin:** As the skin starts to heal, the burned area will naturally become itchy. Aim to keep your hands off the skin. If necessary, apply an antihistamine or a moisturizing moisturizer.
7. **Follow-up of burns:** Most small, superficial skin burns heal within one week, and will not usually form a scar. After partial-thickness burns, the skin may become darker or lighter in color, but it usually leaves a scar if the burn does not heal, or when it spreads. Redness in the area around it exceeding 2 cm, you should see a doctor.



When to seek medical attention?

- ✚ Seek medical attention for burns affecting sensitive areas like the face, hands, genitals, or feet.
- ✚ If burns occur close to joints such as the knee, shoulder, or hip, medical attention should be sought.
- ✚ Medical assistance is necessary for burns that encircle body parts such as the arm, leg, chest, or finger.
- ✚ Any burns that are severe or large, measuring more than 7 cm in diameter, should be treated by a healthcare provider.
- ✚ Burns in individuals under 5 or over 70 years old necessitate medical evaluation.
- ✚ Temperature over 38°C, increased redness, discomfort, discharge, and other signs of skin infection after a burn should be treated.



What should I avoid while skin burns?

- ✚ Opening or touching the bubbles resulting from the burn
- ✚ Do not apply any ointments or use butter, toothpaste, or other treatments on the burn
- ✚ Do not use ice directly on the burned area
- ✚ Do not remove burned clothing stuck to the skin
- ✚ Do not cover a second-degree burn or later with an adhesive bandage or place thin cotton on the affected area, which may irritate the skin



Sources and references:

All images used are from [canva.com](https://www.canva.com)

Review and audit:

The content of this booklet has been reviewed by Emergency Medicine consultants at King Fahd University Hospital.

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