

5 February 2021

Acne

Acne is a skin condition that causes pimples to develop. It is the most common skin disorder, affecting an estimated 85 percent of adolescents.

What causes acne?

- **Hormonal changes** — Hormonal changes during adolescence cause the sebaceous glands (found on the face, neck, chest, upper back, and upper arms), to become enlarged and sebum (an oily substance that lubricates the hair and skin) production increases. In most people with acne, hormone levels are normal, but the sebaceous glands are highly sensitive to the hormones. Acne tends to resolve between the ages of 30 to 40, although it can persist or develop for the first time during adulthood. It can flare before a woman's menstrual period, especially in women older than 30 years. Post-adolescent acne predominantly affects women in contrast to adolescent acne, which predominantly affects men.
- **External factors** — Oil-based cosmetics may contribute to the development of acne. Oils and greases in hair products can worsen skin lesions. People with acne tend to use soaps and astringents, which remove sebum from the skin surface but do not decrease sebum production. Frequent or aggressive scrubbing with these agents can worsen acne.
- **Diet** — Some studies have found weak associations between an increased risk of acne due to natural hormones in cow's milk. However, there is no strong evidence that milk, high-fat foods, or chocolate increases the risk of acne.
- **Stress** — Psychological stress can worsen acne. In several studies of students, acne severity appeared to worsen during times of increased stress.

How does acne develop?

These conditions result in the development of acne lesions:

- **Hair follicles blocked by an overabundance of normal skin cells.** These cells combine with sebum creating a plug in the follicle.
- **The sebaceous glands enlarge during adolescence and sebum production increases.**
- The increase in sebum production allows for **the overgrowth of a bacterium called cutibacterium acnes that normally lives on the skin.**
- **Inflammation due to bacterial overgrowth or other factors.** It can lead to the rupture of the follicle and the formation of a red or tender pimple.

Acne skin care

Skin care is an important aspect of acne treatment.

- **Skin hygiene** — Use your hands to gently wash your face no more than twice daily with a gentle non-soap facial skin cleanser (eg, Cetaphil, Oil of Olay bar or foaming face wash, or Dove bar) and warm water. If possible, avoid the use of a washcloth or loofah.

Vigorous washing or scrubbing, picking or squeezing pimples should be avoided as it may worsen acne and cause skin swelling and scarring. It can also cause lesions to become infected.

- **Moisturisers** — This minimises skin dryness and peeling, which are common side effects of some acne treatments. Moisturisers labelled as "noncomedogenic" are less likely to block skin pores.
- **Skin care products** — Water-based or "noncomedogenic" products are less likely to worsen acne.
- **Sun protection** — Some acne treatments increase the skin's sensitivity to sunlight (eg, retinoids, doxycycline). To minimise skin damage from the sun, avoid excessive sun exposure and use a sunscreen with SPF 30 or higher that is broad spectrum (blocks both UVA and UVB light) before sun exposure.

Acne treatment

There is no single best treatment for acne. Since acne lesions take at least eight weeks to mature, you should use a treatment for a minimum of two to three months before deciding if the treatment is effective.

Can I treat my own acne? — If you have mild acne, you can try to treat it with non-prescription products. These may include salicylic acid, benzoyl peroxide, sulphur, alpha hydroxyl acids, adapalene, or tea tree oil. **A combination of these treatments may be more effective than using one single product alone.** In rare cases, people may have a severe allergic reaction to acne products. As a precaution, try them on just a small area for the first three days.

If you do not improve after three months of using non-prescription products, or you have moderate or severe acne, consult a healthcare provider for advice on the most effective treatments.

Non-inflammatory acne

Non-inflammatory acne causes whiteheads or blackheads without redness or skin swelling.

- **Retinoids** — These include topical retinoid medications such as tretinoin (Retin-A, Avita, Atralin) and tazarotene (Tazorac), which require a prescription, and adapalene (Differin), which is available both by prescription and over the counter.

Retinoids are usually applied once per day. People who develop skin irritation can reduce this to every other day or less, and increase it over time. Most people become more tolerant of retinoids over time. People with oily skin may prefer gels because they have a drying effect, while people with dry skin may prefer a cream.

Retinoids can cause skin irritation. While using topical retinoids, you should apply a sunscreen with SPF 30 or greater before sun exposure.

Mild to moderate inflammatory acne

Treatments such as topical retinoids, topical antibiotics, or benzoyl peroxide are used. A combination of treatments is more effective than treatment with one agent alone.

- **Benzoyl peroxide** — This is usually applied twice per day and may be combined with a topical retinoid. For example, you may apply benzoyl peroxide in the morning and the retinoid at night. Benzoyl peroxide can irritate the skin, occasionally causing redness and skin flaking. It can bleach clothing, towels, bedding, and hair.
- **Topical antibiotics** — This controls the growth of acne bacteria and reduces inflammation. They include erythromycin, clindamycin, sulfacetamide, minocycline, and dapsone.

Moderate to severe inflammatory acne

Oral antibiotics or an oral retinoid known as isotretinoin may be recommended. Topical medication may be used in combination with oral antibiotics. Women often benefit from hormonal treatment.

- **Oral antibiotics** — These slow the growth of acne-producing bacteria. However, they can have bothersome side effects, including vaginal yeast infections in women and stomach upset. Examples of oral antibiotics used for acne include

doxycycline, minocycline, and sarecycline. They cannot be used during pregnancy or in children less than nine years of age.

- **Hormone therapy** — The hormone estrogen can help to offset the effect of androgens (hormones responsible for acne development). Estrogen treatment using a birth control pill may be recommended for women with moderate or severe acne. The benefits may not be noticeable until three to six months of treatment. Hormone therapy is not advised during pregnancy.
- **Acne and pregnancy** — Many acne treatments are not safe for use during pregnancy. Women who are pregnant or intending to become pregnant should consider stopping all acne treatments. If acne therapy becomes necessary, discuss the options with your healthcare provider.
- **Oral retinoid: Isotretinoin** — Oral isotretinoin is a potent retinoid medication that is extremely effective in the treatment of severe acne. It cures and significantly improves acne in the majority of patients. Oral isotretinoin is effective in treating the most disfiguring types of acne.

Oral isotretinoin is usually taken in pill form once or twice daily with food for several months, then stopped. In some cases, acne can initially worsen before it improves and to prevent this, isotretinoin may be prescribed at a lower dosage for the first month of treatment.

Despite its positive effects, oral isotretinoin can have serious side effects and should be used with caution. Taking isotretinoin during pregnancy can cause miscarriage and life-threatening malformations in the baby. For these reasons, there are strict rules in Singapore for healthcare providers on the usage and prescription of oral isotretinoin.

Raffles Skin and Aesthetics Centre

**Make an enquiry online, book an appointment
or contact us at +65 6311 2340.**



Medical Services for COVID-19

The outbreak of COVID-19 has caused much disruption in our daily life and business operations. As Singaporeans, we all have a role to play in the fight to prevent spread of COVID-19 and to protect our families, loved ones and colleagues. To help meet the challenge posed by the current COVID-19 outbreak, Raffles is happy to provide the following services to meet your healthcare needs.



Corporate Health Consultancy

Consult our experts on all healthcare related aspects of COVID-19 in your company. Our services range from acquisition of PPE's, temperature screening services, staff education webinars and planning for prevention / mitigation of COVID-19 at the workplace.

**GET IN TOUCH
WITH US TODAY**

Corporate account
holders
Tel: 6812 6688
[rafflesone@raffles-
medical.com](mailto:rafflesone@raffles-medical.com)

Non-corporate
account holders
[COVID-19support@
rafflesmedical.com](mailto:COVID-19support@rafflesmedical.com)



Raffles Telemedicine

Download our Raffles Connect app for a host of mobile / remote services. These include teleconsultation with medicine delivery and issuance of medical certificates, obtaining clinic queue numbers, receiving the latest COVID-19 advisories and more. All from the comfort and safety of your home / office.



**Raffles
Connect**

Download Now
Available on the App Store and Google Play



Medicine Delivery Services*

Request for repeat of medicine for chronic conditions, medicine previously prescribed for acute conditions or routine over-the-counter medicine without visiting any Raffles Medical clinics.

*Available only for patient with existing records



Scan the QR code to
access this service



Dengue Vaccination

If you have had a previous dengue infection, and are between 12 to 45 years old, you can get vaccinated against dengue.



Scan to
select online

Raffles Home Care Services

Raffles Home Care Services offer you the convenience of getting a vaccination, blood test or clinical procedure done at home, skipping the need to travel to a clinic. Call / SMS 8614 8292 to enquire about any of the following home-based services.



Home-Based FDW 6 Monthly Medical Examination (6ME)

Your foreign domestic worker is required to screen for pregnancy and infectious diseases every six months. Enjoy the convenience of a mobile screening, where we arrange for our medical personnel to go to your home to conduct the tests required.



Find out more
or make an
enquiry [here](#)



Getting Your Vaccination Done At Home

Influenza is a viral infection that causes high fever, muscle aches, runny nose, sore throat and cough. When an infected person coughs or sneezes, anyone who is in close proximity may breathe in the droplets and get infected.

A vaccination to protect you and your family from influenza can be done without going to the clinic. [Find out more](#)