

Chapter 6

Cosmetic care

Proper cosmetic care is the basis of any therapeutic measure. The rosacea skincare program is aimed at:

- Facial cleansing
- Reducing existing irritation and inflammation
- Restoration of the epidermal barrier, moisturizing
- Strengthening of vessel walls and shrinkage of dilated capillaries
- Maintaining a healthy microbiome
- Camouflaging redness with special makeup products
- Protection, especially against UV radiation and pollution

Rosacea can affect the skin with any level of sebum production (sebum deficiency, as well as normal or excessive sebum production) and hydration (dry or sufficiently moisturized). Accordingly, preparations for cleansing and care should be selected individually and **strictly according to the skin condition and type**. However, there are general recommendations for all skin types, so before moving onto specific approaches, let's dwell on general expert advice on choosing skincare products.

6.1. Selecting cosmetic products

Regular gentle skincare and special decorative cosmetics will help the rosacea patient look and feel better, but only if they adhere to the critical rule: **avoid irritation**. The label "for sensitive skin" or "for skin with rosacea" can serve as a guide when choosing cosmetics, although it is not a 100% guarantee that no irritation will occur.

In a study involving 1,066 patients initiated by the US National Rosacea Society, many patients reported having reactions to cosmetics:

41% of participants complained of a general worsening of skin condition when using certain cosmetics, and 21% said that certain products triggered rosacea exacerbation.

To avoid adverse reactions and irritation, experts recommend adhering to the following rules when choosing skincare products and decorative cosmetics.

1. **Make sure the ingredient list is free of potential irritants and traumatizing agents.** In a study conducted by the US National Rosacea Society, the most common irritation triggers cited by patients were substances such as:
 - Alcohol (66%)
 - Witch hazel extract (30%)
 - Fragrances (30%)
 - Menthol (21%)
 - Mint (14%)
 - Eucalyptus essential oil (13%)

Most respondents also indicated that they avoided tightening agents, exfoliating agents, and other ingredients potentially harmful to sensitive skin.

2. **Choose products that do not contain fragrances (synthetic fragrances or natural essential oils).** According to the American Academy of Dermatology, "fragrances are more likely to cause contact dermatitis than other substances." Skin is a large target for exogenous allergens, which can compromise the already weak barrier of sensitive skin. Accordingly, their use increases the risk of irritation. Please note that the label "allergy tested" should not be confused with "hypoallergenic" which is not strictly defined in cosmetic legislation.
3. **A new product should be tested first.** Before applying a new product to your face, you should test it on another part of your body, such as your neck. If there is an unwanted reaction, it should not be used. It is necessary to carefully read and remember the ingredients in its composition. Substances provoking hot flashes and rosacea aggravation differ from person to person, so it is essential to make an individual list of "forbidden" substances.

4. **If possible, minimize the number of cosmetic products used.**

It is desirable to choose multifunctional products, thus reducing their total number. The fewer ingredients they contain, the better.

Substances that can provoke and aggravate rosacea:

- Synthetic fragrances
- Essential oils (all of them without exception)
- Extracts of strongly aromatic plants such as cinnamon, rosemary, lavender, rose, etc.
- Extracts of lemon, lime, mint, pineapple, cedar
- Menthol and its derivatives
- Alcohol (the ingredient list indicates SD alcohol or Alcohol denatured)
- Hazelnut extract
- Salts of fatty acids (natural soap), sodium lauryl sulfate, sodium laureth sulfate, and other high-foaming surfactants

Products to be avoided:

- Natural bar soaps
- Abrasive scrubs
- Alcohol-containing cleansers
- Alcohol- and fragrance-containing toners
- Acid peels
- Brushes

6.2. Skin cleansing

Gentle cleansing is an essential step of the rosacea skincare routine. The face should be washed at least twice a day to remove excess sebum, impurities, microorganisms, and residues of cosmetics and decorative cosmetics.

When cleansing, **never use scrubs, sponges, or any mechanical means that may traumatize the skin.** The cleanser should be applied only with fingertips through gentle circular movements, without rubbing or stretching the skin.

6.2.1. Cleansers

Different products can be used to clean rosacea-affected skin, provided no risky substances exist. Substances that can be applied to healthy skin without any complications may aggravate rosacea, as if the epidermal barrier is damaged, they cause irritation, inflammation, and unpleasant sensation.

Surfactants are potentially harmful cosmetic ingredients. Their molecules are elongated and polar. Most of the molecule is the elongated hydrophobic part, which avoids contact with water. Attached to it at one end is a relatively small hydrophilic group, which is usually charged and faces toward water. Surfactants localize at the interface of immiscible phases, such as oil and water, and cause a decrease in the surface tension between them.

Surfactants dissociating in water to form ions are called **ionic**. There are two ionic surfactants: **cationic** (dissociate in cations, which are positively charged ions) and **anionic** (dissociate in anions, i.e., negatively charged ions). Non-dissociating surfactants are **non-ionic**. **Amphoteric (zwitterionic)** surfactants contain two functional groups. Depending on the pH, these surfactants can exist in an anionic, cationic, or non-ionic state.

The dermatological properties of surfactants depend on the charge: cationic surfactants **(+)** are more irritating to the skin than anionic surfactants **(-)**, and anionic surfactants are more irritating than non-ionic surfactants **(0)**. Thus, the intensity of skin irritation follows the order **(+) > (-) > (0)** making the non-ionic surfactants the safest.

Some of the gentle non-ionic surfactants suitable for rosacea-affected skin are given below:

- Alkanolamides
- Alkyl glycosides
- Alkylamines
- Alkylated amino acids
- Cocamidopropyl betaine
- Coco amino propionic acid
- Poloxamers
- Polyoxyethylated fatty acids
- Polyoxyethylated sorbitol esters

- Sodium cocoafopropionate
- Sodium lauraminopropionate
- Sodium lauroamoacetate

Surfactants are contraindicated for hypersensitive skin with impaired barrier properties, as they can penetrate the lipid barrier and embed themselves in it, causing further damage. Therefore, surfactant-free **micellar solutions** are recommended instead of traditional liquid or bar soap. Micellar solution is a suspension of lipid-composed micelles in water (**Fig. I-6-1**). When applied to the skin, the lipids embed into the fatty plaques on the skin surface and crush them. While micellar solutions will never be as effective as soap as cleansers due to the absence of surfactants, they are preferred for cleaning very sensitive skin.

People with rosacea can also use cleansing milk based on a soft and light emulsion. It is worth noting that milk also contains surfactants, as they are always present even in the most diluted emulsions. But if the sensitive skin is quite heavily polluted, it is better to wipe it with milk and reserve the micellar solution for cleansing not very polluted skin.

Note: **Regardless of the damaged skin's contamination, people with rosacea cannot use traditional soap with fatty acid salts as surfactants and pH over 9.** Nonetheless, **syndets** (= **synthetic detergents**) are still preferable, as these liquid or bar cleansing products have a pH of 5.6–6.5.

Today, new cleansing products that also contain surfactants are increasingly being brought to the cosmetics market, but they are different from traditional surfactants, and their number is still relatively low. Such gentle surfactants make bringing the pH to the desired values

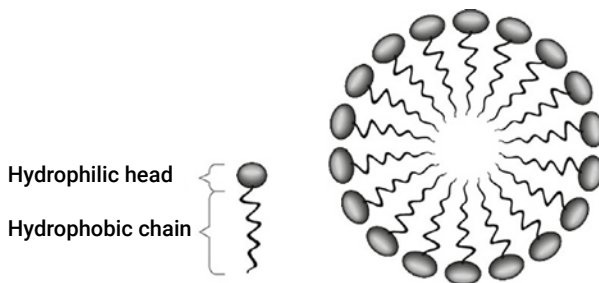


Figure I-6-1. Micelle structure

possible without harming the epidermal barrier. The physiological pH of human skin is 4.5–5.5, so if people with rosacea need soap for heavily soiled skin, they should use syndets. They can look like both solid and liquid soaps — the main thing is that the pH is balanced.

6.2.2. Choosing a cleaning product

The choice of cleanser for rosacea-affected skin depends on the sebum production. As mentioned earlier, the disease can affect the facial skin at any level of sebum production. In sebum excess, the choice should fall on a non-soap cleanser free of fatty acid salts (no more than 10% of these substances are allowed). For those with insufficient sebum, light emulsion (cosmetic milk) containing emollients is recommended. In all cases, without exception, the pH of the cleanser should be slightly acidic and should correspond to the physiological pH of the skin surface (i.e., not exceeding 5.5).

Normal sebum production

Cosmetic milk for damaged skin or a micellar solution can be used for skin with normal or slightly reduced sebum production. However, while cosmetic milk can be removed with sponges, **micellar solutions must be rinsed off the skin!** The soft cleansing base of emulsions is usually enriched with soothing plant extracts (calendula, rose, mallow), and softening components (apricot kernel oil, glycerin). Soap-free emulsions have a physiological pH of about 5.5 and a light gel-like texture.

Low sebum production

For dry low-sebum skin, it is advisable to use mild soap-free cleansers based on micellar solutions or light emulsion (cosmetic milk), free from traditional surfactants and alcohol, with soothing substances (plant extracts of chamomile, arnica, calendula, aloe, etc.). a creamy, low-foaming, soap-free cleanser may be the best choice, as it both cleanses and moisturizes the skin.

Sebum overproduction (oily skin)

Those with oily skin (i.e., with excessive sebum production) should choose a dermatologically mild soap, preferably syndet. It can be in