Hazard of cosmetics and the role of Ayurveda in skincare

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Skin is the largest organ of the human body and requires proper care. In the present era, there is a demand for a good appearance either a slim body or beautiful skin. Increasing call of cosmetics all over the world from teen to adult has increased awareness related to safety issue. Group of fragrances, preservatives, antioxidants, ultraviolet absorbers, emollients, emulsifiers etc are the most common ingredient in cosmetic. A number of skin problems, skin irritation, skin carcinoma, etc. are reported due to the use of cosmetic made up of harmful chemicals. In the traditional era, people were used various Lepa, Alepa, Pralepa, etc. for saundarya prasadam karma. Nature has offered the way to keep up that parity. Herbs are one such means. The Federal Food, Drug and Cosmetic Act (FD&C Act) defines cosmetics by their intended use, as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance". They include hair dyes, makeup, perfumes, skincare creams etc. Cosmetic can cause allergic reactions. The first sign is often red and irritant skin. Manufacturers are required to list all the ingredients in a cosmetic we use, labels such as "natural" and "hypoallergenic" have no official meaning. Companies may use them to mean whatever they want. Good hygiene, along with protecting ourselves from sunburn, insect bites, and other harms, is important to our well-being. There are numerous products on the market, in various forms, such as lotions, sprays, and creams, for cosmetic use or personal care.

Hazardous ingredient in cosmetics

Cosmetics industry has grown 4.5% per year in past 20 years. Due to an increase in Gross Domestic Products (GDP), it was predicted the global beauty market to reach $295 billion in 2019. The expansion of the global beauty market is influenced greatly by the increasing demand from Europe and the Asia Pacific region. Cosmetic and personal care products contain a mix of chemicals. Some examples of certain chemicals, which may be harmful, are given below.

1. In the University of California, researchers studied 58,000 hairdressers, cosmetologists and manicurists and found they had four times the usual rate of multiple myeloma, a malignant bone tumour.
2. Lipsticks and make-up may contain aluminium, a known toxin in humans, to make them long-lasting.
3. Pseudomonas aeruginosa, bacteria highly resistant to therapy, can contaminate mascara and attack an eyeball scratched by microscopic abrasions from soft contact lenses or accidental damage by the applicator brush.
4. Adverse reactions to the industrial foaming agent in bubble baths, like alkylaryl sulfonate, can cause skin rash, urinary tract, bladder and kidney infection.
5. Phthalates are industrial plasticizers widely used in personal care products to moisturize and soften skin, impart flexibility to nail polish after it dries and enhance the fragrances used in most products. Studies indicate that phthalates cause a wide range of birth defects and lifelong reproductive impairments, targeting every organ in the male reproductive system and causing problems ranging from low sperm count to serious genital deformities that can lead to an increased risk of cancer.
6. Alpha Hydroxy Acid (AHA) & Beta Hydroxy Acid (BHA) are commonly used in products promoted to remove wrinkles, blemishes, blotches and acne scars. AHA most definitely make your skin more prone to sun damage with regular use, however, BHA has shown some signs that it’s photoprotective. Products containing these ingredients carry a warning
to use sunscreen and to limit sun exposure while using the product. Perfumes, colognes, after-shave lotions, and other scented products contain volatile chemicals meant to be inhaled.

Skincare through Ayurveda

As already discussed above & alternatives have to be thought off in the form of safe & effective cosmetic agent. Ayurveda is a science of ayu (longevity). "Swasthasya Swasthya Rakshanam" is its important aspect. Ayurveda includes Dinacharya, Ritucharya, Achara Rasayana, Yoga, etc. In Dinacharya, cleaning of teeth, Abhyang, Udvartana, Udghrshan etc are described. Acharya Charaka mentioned Chandan, Nagkesara, Padmak, Ushir, Mulethi etc as Varnya Mahakashya. These drugs are used to improve complexion. Nowadays, Aloe vera, Haridra, Kesar, Nimbha, Nariyalam Mustard, Tila, Apricot, Chandan, Lodhra, etc. are frequently used in herbal cosmetics.

Skin is a mirror of health and beauty. It is our first line of defence against the outside world. It not only controls loss of valuable fluids, prevents the penetration of noxious foreign materials, cushion against shock but also regulates heat loss and transcenders incoming stimuli. According to the Ayurvedic classics, the characteristics of normal skin (ch.vi.8/16-18, p.663) are given in table 1:

Table 1. Characteristics of normal skin

<table>
<thead>
<tr>
<th>Character</th>
<th>Vata</th>
<th>Pitta</th>
<th>Kapha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texture</td>
<td>ruksh, parushyat (dry/ rough)</td>
<td>soft and smooth</td>
<td>thick, soft and moist</td>
</tr>
<tr>
<td>Colour</td>
<td>dark greying due</td>
<td>avdaat (fair), vyang tilpidika (moles)</td>
<td>fair with glow</td>
</tr>
<tr>
<td>Touch</td>
<td>cold</td>
<td>warm</td>
<td>soft cool</td>
</tr>
<tr>
<td>Smell</td>
<td>not particular</td>
<td>foul body smell</td>
<td>smooth, oily</td>
</tr>
<tr>
<td>Hairs</td>
<td>parushya (rough)</td>
<td>mridu (smooth, oily)</td>
<td>not particular</td>
</tr>
</tbody>
</table>

Massage the body with love and patience for 15-20 minutes. Here are the recommendations for frequency and oil type, based on the doshas.

For dry skin (vata dosha)

Use a warm, heavy oil such as sesame oil, almond oil, avocado or bhringraj oil.

For sensitive or overheated skin (pitta dosha)

Use cooling or neutral oil such as olive, sunflower, coconut, or ghrit (clarified butter).

For oily skin (kapha dosha)

Use stimulating oil like mustard, or light oil such as flaxseed, corn, or safflower.

Sesame oil called till oil in Sanskrit has reportedly been known since Vedic times. The ancient Ayurvedic scholar Charaka, in his well-known treatise on Ayurveda, claims that it is the best of all oils. It is rich in linoleic acid and has antibacterial, anti-inflammatory and anti-oxidant properties, sesame oil is especially useful for pacifying Vata. It is very nourishing, and prevents the skin from getting excessively dry.

When compared to other oils, sunflower oil has one of the highest contents of Vitamin E, a known antioxidant. It also has a wealth of unsaturated fatty acids, lecithin, as well as vital minerals and vitamins. Sunflower oil is especially beneficial for acne-prone, inflamed skin. Mustard oil penetrates deeply into the skin and is known to pacify and reduce Kapha dosha.

Haridra (Curcuma longa)

It is an anti-bacterial agent, anti-ageing, improves skin elasticity, lightens pigmentation, controls oily skin, lightens stretch marks, cures acne, heals cracked heels.

Chandan (Santalum album)

It prevents and cures pimples, reduces wrinkles and signs of ageing. heals dry skin, enhanced skin brightness, removes blemishes, exfoliates the skin. When the skin produces sebum and oil in excess quantities, impurities, dirt, and germs clog the skin pores. This traps the sebum and oil below the skin surface and results in pimples. Sandalwood’s anti-bacterial properties also help your skin fight the acne-causing bacteria, making your skin look flawless.

Kesar (Crocus sativus)

It possesses therapeutic properties, and the potassium in it helps with cell formation and repair. Saffron benefits skin because it contains many vitamins and antioxidants that are beneficial to the skin. It is anti-inflammatory and soothes skin. It is anti-fungal and can be used to treat acne.

Pakmaka (Prunus cerasoides)

It is used for the treatment of skin diseases, and also increases complexion.
Lemon (*Citrus limon*)

It treats dry and dull skin, lemons have bleaching properties that lighten skin, but for better skincare, it also acts to exfoliate the skin to remove dead skin cells. Eliminate sebum and excess oil, fades blemishes, reduces acne scars etc.

Heena (*Lawsonia inermis*)

Fresh leaves of heena may be used as a topical antiseptic for fungal or bacterial skin infections, including ringworm. Henna helps to improve hair health.

Manjistha (*Rubia cordifolia*)

It is a potent anti-oxidant, anti-inflammatory and anti-microbial. It is used in skin-related issues, such as persistent acne.

Mulethi (*Glycyrrhiza glabra*)

It is considered as one of the best for skin whitening and fairness. Mulethi packs are good to treat the dark spots and black marks. The roots act as great skin healer that cures the dryness and roughness. Yet another great benefit of using liquorice in the skincare routine is that this will give you immense anti-oxidant benefits. So, your skin cells are not damaged by oxidative stress and free radicals.

Neem (*Azadirachta indica*)

Use neem water as skin toner regularly will help in clearing acne, scars, pigmentation and blackheads. With its regenerative properties, neem helps the skin fight pathogens below its surface. Neem helps in reducing pigmentation and also acts as a moisturizing agent. reduce the effects of ageing by applying neem oil on the face or adding neem powder to your face-pack.

*Aloe vera* (*Aloe barbadensis*)

Aloe moisturises the skin without giving it a greasy feel, so it is perfect for anyone with an oily skin complexion. Aloe vera helps with sunburn through its powerful healing activity at the epithelial levels of the skin, a layer that covers the body. It contains numerous antioxidants that include beta-carotene, vitamin C & E that can help improve the skin's natural firmness and further keep it hydrated.

Overall, herbal cosmetics are having comparatively lesser or no side effects. The consumer should get updated about the harmful effects of chemical cosmetics and with knowledge and awareness of the presence of the ingredient in the products they used.

**How to cite this article?**

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