A clinically practical approach to acne

Part 1: diagnosis, assessment and general skin care

Good lifelong skin care practices, including effective sun protection, are particularly important in people prone to acne.

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Acne is one of the most common skin diseases with around 85% of Australians aged 15 to 24 years having the condition. Adolescent boys and young men are more likely to have acne than their female counterparts and make up the majority of severe scarring cases. Most cases of acne in young men will spontaneously resolve in their early 20s. Women, however, are more likely to suffer from ongoing acne that commences or reappears during their early adult years. Around 8% of women have acne persisting into their 30s, and in some it continues into their 40s and occasionally 50s.

Acne is associated with significant morbidity and is more than just a normal part of growing up. Poorly controlled acne, whether mild, moderate or severe, can have a lasting legacy in terms of both physical and psychological scars. Its high visibility and its onset during the formative years have psychoemotional impacts, and studies have shown acne to be associated with feelings of self-consciousness, low self-esteem, depression and anxiety.[1,2] Many people with acne avoid socialising, playing sport and participating in other peer activities. Acne can all too often interfere with enjoyment of life and hinders many from actively pursuing their aspirations.

Acne management should involve consideration of disease pathogenesis and comorbidities, recent investigative research advances in skin care and topical product formulation, and also the growing number of randomised controlled trials in mild to moderate acne. This article, the first of two on acne, discusses pathogenesis, diagnosis and assessment and also the importance for people with acne of good lifelong skin care practices, including sun protection. Topical and systemic treatment is discussed in detail in the second article, due to be published in a future issue of *Medicine Today*.

IN SUMMARY

- **Acne is not just 'part of growing up'. It is one of the most common skin conditions, and has an enormous physical and psychological impact if left untreated.**
- **The classification of acne is based on the different types of lesions present and can be divided into mild, moderate and severe.**
- **Acne management should involve consideration of disease pathogenesis and comorbidities in each patient.**
- **Avoidance of scarring is fundamental in the management of acne.**
- **Good rapport and patient education are vital for compliance with therapy and for long-term improvement.**

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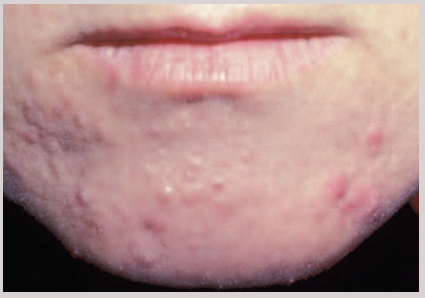
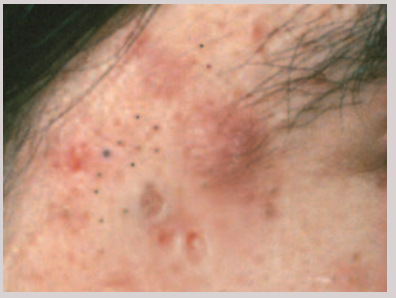
Diagnosing and assessing acne





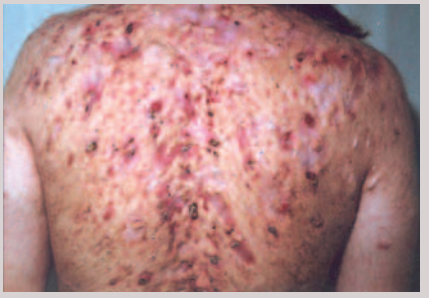


Figure 1 (left). Persistent adult female ('hormonal') acne often starts or re-presents in the later teenage years and/or early twenties with prominent chin and jawline involvement. The inflammatory papules often flare virtually overnight, usually in a cyclical pattern. This type of acne can be very persistent and distressing to adult patients.

Figure 2 (centre). Comedonal plus deeper inflammatory lesions including nodules in a 17-year-old adolescent. His acne had been getting progressively worse despite a year of doxycycline 100 mg per day. The ice pick scars are a subtle warning that if the acne if not rapidly brought under better control then the patient is at risk of more extensive scarring with new lesions. Scarring can be quickly progressive when accompanied by tender nodular and/or cystic acne lesions.

Figure 3 (right). Severe acne in a man in his early 20s. The numerous severely inflamed lesions have given rise to significant scarring (ice pick scars, white macules, atrophic soft depressed scars, cysts and keloids). Urgent referral to a dermatologist is recommended.

Pathogenesis

The pathogenesis of acne is multifactorial. In the pilosebaceous units of people genetically predisposed to acne, normal or elevated levels of androgenic hormones, excess and altered sebum production and abnormal follicular keratinisation can result in the formation of keratin plugs. The keratin plug blocks off the pilosebaceous unit's drainage, leading to the accumulation of pro-inflammatory follicular debris and increased bacterial numbers, commonly including the anaerobe *Propionibacterium acnes*. As the pilosebaceous unit becomes increasingly distended, mediators of inflammation leak out.[3,4] Inappropriately manipulating acne lesions other than pustules (zits) and open comedones (blackheads) can result in deepening and worsening of this inflammatory process and an increased likelihood of permanent scars. Closed comedones are thought to be the precursors for more disfiguring lesions. If the pressure in the follicle is sufficient the inflammatory reaction will be such that papules, pustules, nodules or cysts are formed. The features of the various acne lesions are described in Table 1.

Acne is primarily an inflammatory rather than infective dermatosis. Follicular and perifollicular inflammation contribute to comedone formation and are responsible for many of the visible signs of acne and acne scarring. Immune phenomena underlie both comedogenesis and the formation of inflammatory lesions. *In vitro* studies have demonstrated that cytokine interleukin-1 alpha, derived from ductal keratinocytes, can promote hypercornification in the absence of other mediators. It is postulated that this cytokine causes the scaling seen in many inflammatory skin diseases.[5] The skin's innate immune defences are mainly responsible for the inflammatory lesions seen in mild to moderate acne. Macrophages are at least partially activated by *P. acnes* via Toll-like receptor 2 (TLR2). A T-cell driven exaggerated or 'hypersensitive' immune response to *P. acnes* dominates in more severe cases of inflammatory, cystic and scarring acne.[6] This necessitates rethinking of our traditional acne lesion classification scheme that categorised lesions into three main groups, 'non-inflammatory' or comedonal, inflammatory and nodulocystic. This classification was used to guide the use of anti-inflammatory or comedolytic therapy. More accurately acne can be classified as mild, moderate or severe inflammatory acne.

Diagnosing and assessing acne

Acne, a clinical diagnosis, mainly affects skin areas with a high density of pilosebaceous units, such as the face, neck, upper trunk, shoulders and proximal arms.[7] Most teenagers and young adults show some evidence of acne, with the highest prevalence between the ages of 15 and 24 years. Onset peaks during puberty and the condition usually resolves by the late teens or early 20s. Females in particular can develop acne for the first time in their adult years and are more likely to suffer from ongoing acne, it often persisting into their 30s and 40s (Figure 1). Young males

are more likely than young females to have the more severe, longer lasting forms of acne. Acne conglobata is an example of such type of acne, and has a familial tendency. It has a relatively late onset in both genders, often starting during the late teenage or early adult years, and may follow the resolution of mild teenage acne.[8]

The type, extent and severity of acne lesions vary significantly between patients and at different times within the same patient (Table 1 and Figures 2 and 3).

Severity assessments for acne are based on the extent of skin involved, the number and type of lesions, and the degree of associated inflammatory changes. Table 2 provides a guide to severity assessment and the initial management of acne.

When clinical findings such as onset, lesion type, location and severity are atypical, secondary causes of acne should be considered. Medications, endocrine diseases and occupations that may cause or exacerbate acne are listed in Table 3.

Points that should be kept in mind when assessing a patient with acne include the following:

- whether you are seeing the patient on a day when his or her acne is 'good' or 'bad'
- the distribution of the lesions
- for each area affected by acne:
  - the predominant types of lesions
  - whether the lesions are superficial or whether there are deeper, tender, inflammatory changes including any nodules and/or cysts
  - the degree of associated inflammation
  - the degree of post-inflammatory pigmentary disturbance
  - presence of scarring (early subtle changes including ice pick marks and white macules)
- evidence of significant picking and squeezing of pimples
- the psychosocial impact acne has had on the patient
- the patient's expectations and goals of treatment.

Table 1. Acne lesions

Non-inflammatory lesions

- **Open comedones**
  Visibly blocked dilated pilosebaceous pore, filled by darkened keratotic debris (blackheads)
- **Closed comedones**
  Small skin-coloured bumps; the blocked pore is not clinically visible but appears white (whiteheads)

Inflammatory lesions

- **Papules**
  Relatively superficial nontender red raised lumps (<5 mm in diameter)
- **Pustules**
  Superficial fragile small white pus-filled domes that heal without scarring (zits)
- **Nodules and cysts**
  Often occur together, characterising nodulocystic forms of acne
  Usually tender and/or painful, firm to solid lumps connected to the skin but extending deeply into subcutaneous tissue
  May be associated with significant surrounding inflammation
  Cysts contain purulent material and may rupture, producing eroded oozing lesions that may heal slowly and result in scarring

Secondary lesions

- **Erythematous macules**
  Transient red macular spots that fade over days to weeks (they are healed inflammatory acne lesions that are flattening and resolving)
  Most frequently affect fairer skin types
- **Hypopigmented and hyperpigmented macules**
  Pigmentary disturbance following earlier inflammatory acne lesions; can take months to even out
  Most frequently affect darker skin types
- **Scars**
  - Ice pick marks (small deep pits)
  - White (featureless) macules
  - Soft depressed atrophic scars (reduction or loss of epidermal, dermal and adipose tissue)
  - Keloidal scars
  - Fibrous bridging scars

Psychosocial impact of acne

Acne can have profound psychological effects and sequelae, including depression, anxiety, poor self-image, frustration, anger, preoccupation and social isolation.[1,2] People with acne are more likely to be unemployed and less likely to apply for job promotions.

In many patients, the psychological impact of acne does not reflect the condition's medical severity. The recurrence of relatively minor acne in someone with previously severe disfiguring disease can lead to profound distress due to the fear of severe acne recurrence and permanent scarring. Tailoring of management needs to be based on clinical disease severity and its psychosocial impact.

Should an acne patient return for follow up dissatisfied with their disease control, despite adherence to an escalating treatment regimen over a reasonable time frame, a low threshold for referral to a dermatologist is recommended.

Treatment goals

The primary goals of acne treatment are:

- prevention of permanent acne scars
- rapid control of more visible and destructive inflammatory lesions
- maintenance therapy targeting early steps in comedogenesis and preventing future disease flares
- monitoring and addressing any psychosocial morbidity.

The secondary goals of treatment for the condition are:

- promotion of healthy long-term skin care practices
- scar correction.

continued

Table 2. Severity assessment and initial management of acne

Severity	Lesions	Extent	Initial management
Mild	Open and closed comedones Occasional flares involving inflammatory lesions Limited in extent and only superficial papules and pustules	Largely limited to face	Can usually be effectively controlled by appropriate skin care and topical (OTC and/or prescribed) medicated creams
Moderate	More numerous open and closed comedones, inflammatory pustules and papules	Mainly face and/or limited upper trunk	Single or combination topical therapy can be effective when limited to face If widespread or mainly involves trunk, start with a systemic antibiotic +/- COC* (in females with persistent and/or recurrent acne) +/- topical therapy for faster and/or better long-term facial acne control
Moderate to severe	More inflammatory, still predominantly superficial acne lesions with occasional nodular and/or cystic lesions	Head, neck and upper trunk	As above combining a medicated topical treatment(s) for the face +/- systemic antibiotic +/- antiandrogenic and/or low androgenic COC* Consider early referral to dermatologist
Severe	Presence of deeper tender inflammatory nodules and cysts Numerous, recurrent and/or severely inflamed lesions that can cause significant skin damage and scarring	Head, neck, trunk, occasionally extending to buttocks and thighs	Urgent dermatology referral Intralesional corticosteroid injections Occasional drainage Topical therapy +/- systemic antibiotics, +/- COC* +/- oral isotretinoin (potent teratogen, prescribing restrictions)

Abbreviations: OTC = over-the-counter; COC = combined oral contraceptive.
* Only cyproterone acetate- and low dose levonorgestrel-containing COC pills are registered for an acne indication by the Therapeutic Goods Administration.

Scar prevention and treatment

Most acne scars and their psychosocial consequences are preventable. Scar prevention involves early identification of those people at risk of scarring and the use of effective therapies with close follow-up.

Patients at risk of significant acne scarring include those:

- with nodulocystic acne – this type of acne can rapidly worsen and quickly cause extensive scarring
- with acne scars – purely comedonal acne, for example, can progress to scarring without clinically significant inflammation needing to be present
- with persistent inflammatory acne – after two years these patients are at significantly higher risk of developing significant scarring; this includes individuals with mainly inflammatory papules and pustules
- who manipulate inappropriate lesions despite counselling.

All these patients should be considered for early dermatology review; urgent review should be requested for those with severe acne. Siblings of patients with nodulocystic scarring acne should be referred for dermatologist care early, such as when moderate acne first begins, before nodular and/or cystic lesions develop.

While some types of acne scarring may improve slowly over the years and others may remain unchanged, most undergo accelerated (photo)ageing long after the acne has resolved, making the patient at risk of looking old well before their peers. The best way to manage acne scarring is to avoid it by timely treatment and patient education about not traumatising acne lesions. The degree of scarring is related to acne severity and duration before adequate treatment.

Most scarring in acne is atrophic rather than hypertrophic. Papular and cystic acne can produce scarring, and nodulocystic acne has marked scarring. Keloidal and hypertrophic scarring is more common in males, particularly on the trunk.

Atrophic scarring involves destruction and dissolution of the supporting tissues. Generally, the scars initially improve, with erythema subsiding and the scars maturing over two to three years. Eventually, however, the scars become more obvious as, with age and sun damage, the facial fat stores are resorbed and the facial tone

Table 3. Secondary causes of acne

Medications

- Hormonal agents
  - Anabolic steroids (illicit or medically prescribed, e.g. testosterone, danazol)
  - Corticosteroids
  - Some combined oral contraceptive pills
  - Progesterone-only oral contraceptive pills ('mini pills')
- Phenytoin
- Lithium
- Antituberculosis drugs (isoniazid, rifampicin)

Endocrine disease

- Onset at age less than 10 years
  - Congenital adrenal hyperplasia
- Adult females with acne +/- other signs of androgenisation
  - Pregnancy (first trimester)
  - Polycystic ovarian syndrome
  - Ovarian tumours

Occupational acne

- Acne mechanica (chronic physical pressure and irritation)
- Hot and humid work locations

decreases so that the inelastic scar tissue binds the skin, giving an uneven appearance.

Treatment options for acne scarring include lasers, plasma resurfacing, microdermabrasion, fillers, intralesional corticosteroids, silicone sheeting and novel blue light therapy.[9] Carbon dioxide or Erbium lasers are used on a variety of scars to carefully remove a controlled amount of the damaged outer layer of skin.[10] The open wounds heal, with skin remodelling. These lasers also stimulate new collagen formation, which provides structure and strength to the skin. Skin resurfacing can soften scars, even out discolouration and produce a smoother and tighter appearance. Lasers have largely replaced earlier resurfacing techniques such as chemical peels and dermabrasion in the treatment of acne scarring.

Plasma resurfacing does not seem to produce the hypopigmentation that has been a significant problem with the sort of deep resurfacing (i.e. lasers and deep peels) required to treat acne scarring. Plasma resurfacing uses high-energy nitrogen plasma to damage the top layers of skin. Unlike laser resurfacing, there is no burning so the old skin remains until the new layer grows underneath. There is no open wound during healing, unless the damaged skin is scratched off. The new skin continues to transform for months afterwards, and the new collagen formation has a more natural layout than that following laser resurfacing and peels.

Hypertrophic scars may be softened and flattened by the use of corticosteroids, either applied to the surface of the skin or, more commonly, injected into the scar. Recently, fluorouracil has been successfully used to flatten scars by being injected into the scar.[11,12]

General advice

Squeezing acne lesions is likely to worsen their visible appearance and slow their resolution, and is a major cause of associated scarring. Only superficial pustules and easily extruded blackheads can be safely manipulated; the face and hands should be cleansed before doing so, and a comedone extractor may be used. Surgical drainage of abscesses is rarely indicated.

It is important to dispel any deleterious myths patients may have about acne, such as it being due to poor skin hygiene and blackheads representing retained dirt (acne cannot be scrubbed away).

Most people with acne continue to believe that certain foods or food groups worsen their acne. They are probably right. A recent Australian Beef Industry-sponsored trial worthy of independent con - firmation found that diet does alter acne severity.[13] This contrasts with information contained in acne texts that traditionally state that foods, including chocolate and fast foods, do not play a role in the pathogenesis of acne. Most studies looking at acne and diet are from the 1960s and 70s, and these were all poorly designed and inadequately powered. In this recent study, from Melbourne, a diet high in beef and with a low glycaemic index was associated with a clinically significant, although only relatively limited, improvement in acne irrespective of its severity.[13]

Skin care advice

Good skin care is important for all people with acne. The growing number of skin care products available can, however, make choosing the best products bewildering. Those with acne should be guided regarding the appropriate skin care products to both help control their acne and avoid treatment-related problems.

The best skin care routine for acne-prone skin is: cleanse, treat and protect. Cleansing and protection are covered here; treatment is covered in the aforementioned other article on acne.

Cleansing

Overcleansing is a common cause of problems in acne. As most acne treatments tend to damage or weaken the skin's natural barrier, it is safest to recommend the use of only mild skin care products, to help maintain a healthy skin barrier (Figure 4). Skin barrier damage by overzealous or harsh cleansing disrupts normal skin keratinisation, leading to:

- skin that is rough, dry, flaky and red and has bumps
- increased numbers of bacteria, including pathogens, on the skin
- promotion of comedone formation
- skin that is burning and stinging (e.g. precluding use of even only mildly irritant sunscreens and acne treatments)
- disillusionment with the acne treatment also being used.

Cleansing of the face should be limited to the following times:

- in the morning – to ensure removal

of the residues of overnight acne treatments, which can make the skin more photosensitive
- in the evening – to remove sunscreen and make-up residues, as even those touted suitable for acne-prone skin can sometimes worsen acne by clogging and irritating pores
- after hot, sweaty activities.

The use of skin toners is not recommended as they can increase the user's risk of irritation from acne treatments – only printers and photocopiers need toner.

Suitable facial cleansers

Patients should be advised to use a mild 'soap-free' liquid face cleanser that is acid and/or pH balanced and free of abrasives and alcohol. Those with an oily skin should choose a cleanser with 'high rinsability' (i.e. it does not contain a moisturiser that leaves a surface film), such as Neutrogena Oil-Free Acne Wash, L'Oreal Pure Zone and Garnier Pure. Those with a combination, dry, sensitive or irritated skin and those planning to use acne treatments containing benzoyl peroxide or a retinoid should choose a liquid cleanser that contains added moisturisers (e.g. cetyl alcohol or glycerine) to help protect the skin and speed its repair if dry and irritated, and leave a surface film. A few examples are:

- Cetaphil Gentle Skin Cleanser
- Cetaphil Oily Skin Cleanser
- Dermaveen Soap Free Wash
- Neutrogena Extra Gentle Cleanser
- Sebamed Face and Body Wash
- QV Gentle Wash.

More highly moisturising cleansers should generally be avoided (e.g. those containing paraffin oil).

'Medicated' cleansers

Most topical acne therapies are delivered using leave-on gels or creams. In contrast with these therapies, cleansing only provides a brief period of contact between the medicated ingredients in a cleansing product and the skin before rinsing occurs. It is important that the results of studies on leave-on topical acne therapies should not be extrapolated to cleansers containing the same ingredients (e.g. salicylic acid, benzoyl peroxide, tea tree oil).

Use of a medicated cleanser containing the 'antibacterial' ingredients triclosan, chlorhexidine and/or tea tree oil, for example, has not been supported by controlled studies, and carries the known risk of causing or contributing to irritant skin reactions. Montaline-C40 (cocamidopropylalbetainamide MEA chloride) in Sebamed's Clear Face Antibacterial Cleansing Foam when used twice a day for five minutes has been shown, in company- sponsored studies, to be gentle on the skin, quickly and dramatically reduce numbers of *P. acnes* and improve mild acne. Salicylic acid-containing cleansers are also likely to have some beneficial effects but further study is required.

Protection: moisturisers, cosmetics and sunscreens

People with acne should be advised against the overuse of moisturisers. This includes use of cosmetics (make-up) and/or sunscreen during the day and possibly moisturiser at night to protect skin against adverse environmental insults such as sunlight, wind and dryness.

Skin barrier damage

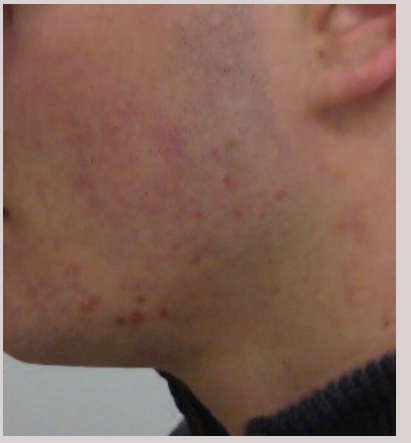


Figure 4. Pseudofolliculitis barbae. Inflammatory acneiform lesions due to follicular trauma and irritation can be caused by adolescent and young adult males with fine and/or curly beard hairs and superficial inflammatory acne making multiple passes while shaving (particularly when using a triple or quadruple blade razor) and/or using a highly fragranced or drying shaving cream or gel. Salicylic acid preparations and retinoids are useful long-term control treatments, along with a gentler less close shave. Antibiotics and or antibiotic–benzoyl peroxide combinations are useful for acute flare control.

Moisturisers and moisturising cleansers

Many moisturisers and cosmetic products can cause or worsen acne. Products labelled 'oil-free' and 'suitable for acne-prone skin', are a good choice, but some may worsen acne. Products labelled noncomedogenic have been specially tested in acne-prone individuals and have been proven not to clog pores and worsen acne. Silicones (dimethicone and cyclomethicone) are good ingredients to look for in light moisturising gels and lotions as they will not worsen acne and will actively protect the skin against irritation. Silicones give creams a silky smooth feel.

Acne patients usually have oily facial skin, making moisturiser use unnecessary. A gentle cleanser with a light moisturising action is generally all that is necessary. A moisturiser can, however, be beneficial for those with combination or dry skin that is sensitive or irritated. It should be applied in both the morning and the evening to skin areas irritated by acne treatment (red, flaky and/or itchy), and possibly also to sensitive skin areas not involved by acne (such as around the eyes, the sides of the face and adjacent to lips and nostrils) along with the neck.

Applying it at the same time as topical acne therapies helps avoid worsening irritation. Ideally the moisturiser should be labelled for acne- prone skin. For patients whose skin is mildly irritated, an oil-free moisturiser labelled for acne-prone skin should normally be applied over the top of applied medicated topical acne therapy. If irritation persists or causes symptoms (e.g. stinging, burning or itchiness), moisturiser can be applied prior to the topical acne therapy.[13]

Cosmetics

Noncomedogenic cosmetics and cosmetics for acne-prone skin should be used whenever possible. It is important to remove any make-up residue at the end of the day by washing. Even products labelled as suitable for acne-prone skin may, if left on, sometimes worsen acne by clogging and irritating pores.

Sunscreens

In Australia, the deleterious effects of sunlight on a person's skin far outweigh any minor benefits sunlight may have on his or her acne. Most acne treatments (topical and systemic) increase the skin's susceptibility to the deleterious effects of sunlight, including sunburn, pigment changes and photoageing of the skin. This is because they make the skin more sensitive to ultraviolet (UV) light, particularly UVA, the part of the sunlight spectrum most involved in skin ageing.[14] Therefore, good sun protection and avoidance practices will help reduce the risk of skin cancer in a person being treated for acne.

Acne scars are particularly prone to the deleterious effects of UVA. Without good UVA protection these can rapidly photoage, loosing their elasticity and collagen support. This results in loose, sagging facial skin that makes a person with acne scarring at risk of looking older than their years.[13]

Sunscreens in gel, liquid, milk and spray formulations are a good choice for people with oily acne-prone skin. Most high sun protection factor (SPF) broad-spectrum sunscreen creams are generally irritating and acnegenic. If extremely high UV protection products are inappropriately overused in combination with sun avoidance, vitamin D deficiency can arise. Realistic recommendations for sunscreen use should be made, such as use of SPF 10 to 15 sunscreens for everyday sun exposure and SPF 25 to 30 products for longer periods (several hours) of exposure, before and after the peak UV period. During the peak UV period it is recommended that people should not be outside at all. The better a sunscreen is tolerated without acne flares, burning or stinging, the greater the compliance will be.

UVA blockers

Two new families of sunscreen actives provide excellent, durable, chemically photostable UVA and UVB protection, including water and sweat resistant products. They are also less irritating and so far appear less allergenic. The newUVA protectors are mexoryl SX (drometrizole trisiloxane), mexoryl XL (Ecamsule, also known as terephthalylidene dicamphor sulfonic acid), bisoctrizole (methylenebis-benzotriazolyl tetramethylbutylphenol) and bemotrizinol (bis-ethylhexyloxyphenol methoxyphenol triazine). These blockers are found in Garnier Ambre Solaire and Lancôme sun protection products, and are starting to be included in other sunscreen brands. Unfortunately, the products containing these UVA blockers are not yet formulated specifically for use on acne-prone skin.

Avobenzone (butyl methoxydibenzoylmethane) is the main chemical UVA blocker still used in most Australian made and owned sunscreen gels, sprays and lotions. It is less effective, less photostable, more irritant and more allergenic than the newer agents. However, when combined with mexoryl it becomes more photostable, less irritant and possibly less allergenic. Similarly, sunscreens containing avobenzone and the commonly used UVB blocker oxybenzone combined by Helioplex stabilising technology provide high photostable broad-spectrum protection (e.g. Neutrogena Sun Protection with Helioplex).

Physical blockers (titanium dioxide and zinc oxide) also provide good UVA protection but many people, and men in particular, do not like the ghost-like skin appearance conferred by sunscreens containing them. Many of the SPF30+ sunscreen products formulated with physical blockers alone are essentially non-irritant but some are heavy and acnegenic despite being labelled oil-free.

Conclusion

Poorly controlled mild, moderate or severe acne can have a lasting legacy in terms of both physical and psychological scarring. Most acne scars are, however, preventable with early identification of those people at risk of scarring and the use of effective therapies with close follow-up.

Effective holistic care of patients who consult for managing their acne can prove very rewarding. The opportunity should be taken whenever possible to promote the virtues of good lifelong skin care practices. This should include realistic sun protection practices, including the use of SPF sunscreens appropriate for individuals prone to acne. MT

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