Children's Hospital of Wisconsin
Medical College of Wisconsin
Children's Specialty Group

ACNE VULGARIS CLINICAL GUIDELINES

Definition

Acne vulgaris is the most common skin problem in the U.S., affecting approximately 80% of the population. It is a multi-factorial condition of the pilosebaceous unit. There are four interrelated processes including: androgen stimulation, hyperkeratosis, Propionibacterium acnes proliferation and inflammation. Treatment is indicated to improve emotional well being and to prevent permanent scarring.

Skin care for patients with acne

Patients should wash their face twice daily with a gentle cleanser or an acne type cleanser. It is important that all products that are used on the skin are non-comedogenic or oil free. This includes moisturizers, cosmetics and sunscreen. Hair grease, pomades and oil should be kept away from facial skin. Patients should avoid harsh soaps, abrasive cleansers, masks and astringents. It is important that patients do not manipulate lesions as this increases risk of scarring.

Over-the-counter recommendations for mild acne

There are many over the counter products for acne. The active ingredients in these products are usually between 0.5%-2.0% salicylic acid and 2.5% and 10% benzoyl peroxide. Patients with sensitive skin should start with a low strength salicylic acid or benzoyl peroxide cleanser. This can be increased as tolerated. Many patients can tolerate a stronger strength benzoyl peroxide for the chest, back and shoulders. Patients should be aware that benzoyl peroxide can bleach fabrics including washcloths, towels, shirt collars and pillow cases.

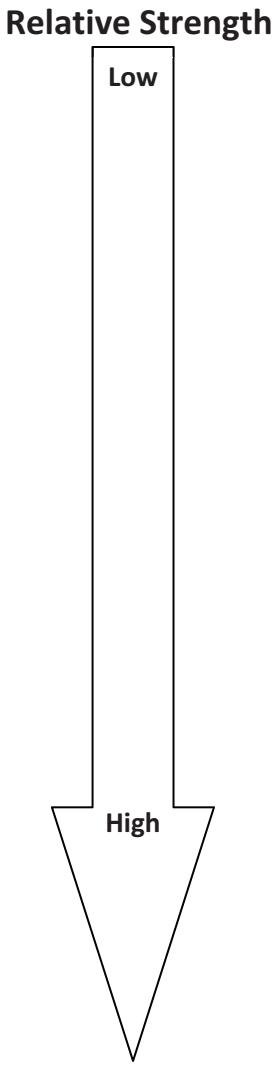
First line therapy for comedonal acne

Topical retinoids should be considered for the initial prescription management of most acne patients. Retinoids reduce follicular hyperkeratosis; prevent formation of the microcomedone and some have an anti-inflammatory effect. It is important to start with a low potency retinoid to determine tolerability. Creams are generally better tolerated for patients with sensitive skin. Gels are better for patients with oily skin or more severe symptoms. Common side effects include: erythema, xerosis and peeling which occur during first 3-4 weeks of use. Irritation from topical retinoids can be reduced by washing with a gentle (non-medicated) cleanser and applying a non-comedogenic moisturizer as needed. Waiting 20 minutes after washing the skin before applying retinoids can also increase tolerability of the medication. A non-comedogenic sunscreen should be used on the face and all exposed skin in the morning because most acne medications increase photosensitivity. A pea-sized amount of the medication should cover the entire face and should be applied to dry skin before bed. Patients should be informed that the medication is preventative and that it does not work as spot treatment for individual lesions.

Approved By: Joree Ruiz, PA
Date: February 7, 2013
Office Phone: (414) 266-1569

Table 1: Retinoids

Type of Retinoid	Product name	Generic available
Adapalene	Differin	
	0.1% lotion	Y
	0.1% cream	Y
	0.1% gel	Y
	0.3% gel	N
	Epiduo	N
	Benzoyl peroxide 2.5%gel & Differin 0.1% gel	
Tretinoin	Retin-A Micro	
	0.04% gel	N
	0.1% gel	N
	Atralin	
	0.05% gel	N
	Retin A	
	0.025%, 0.05%, 0.1% cream	Y
	0.01% & 0.025% gel	Y
	Ziana	N
	0.025% gel with 1.2% Clindamycin gel	
Tazarotene	Tazorac	
	0.05% & 0.1% cream	Y
	0.05% & 0.1% gel	Y



Topical antibacterial agents

Patients with an inflammatory component benefit from the addition of topical antibacterial agents.

- Clindamycin is the most commonly used topical antibiotic. It is available in gel, solution, lotion, foam and pledget.
- Monotherapy with topical clindamycin can lead to resistance and combination treatment with benzoyl peroxide will decrease that risk.

Approved By: Joree Ruiz, PA
Date: February 7, 2013
Office Phone: (414) 266-1569

- There are some combination products with benzoyl peroxide and clindamycin gel which offer the convenience of two medications in one product. Examples include Duac and BenzaClin; both 5% Benzoyl peroxide gel and 1% Clindamycin gel.
- There is also a lower strength combination product Acayna gel, which is 2.5% Benzoyl peroxide gel with 1% Clindamycin gel.

Table 2: Topical agents

Product	Formulation	Mode of action	Advantages	Disadvantages
Antibiotics	Gel, lotion, solution, pledgets	Inhibits growth of P. acnes Anti-inflammatory	Well tolerated	Resistance
Benzoyl Peroxide	Gel, lotion, pads cleansers	Bacteriostatic Anti-inflammatory	Availability Decreased resistance	Irritation Bleaches fabrics
Retinoids	Gel, cream, lotion microgel	Comedolytic	Best for comedonal acne	Irritation Cost-Brand

When to consider oral agents or referral

Many patients with mild to moderate disease will improve with traditional first line therapies. Patients with deep cystic lesions, acne scarring, body acne, patients unable to tolerate topical medication and patients that do not respond to topical agents should be referred to dermatology.

Summary

Setting appropriate expectations is important to increase treatment compliance. Non-compliance is a major cause of poor therapeutic response. It is important that patients understand that it can take 6-8 weeks to see improvement with the start of any new acne treatment. It should also be explained that treatment is not curative and that they will likely need to continue medications long term. Patients should be counseled on the changes in acne over time and that therapy will also need adjustments. Teenagers need to know that acne treatment is individualized and that what works for one person might not work for another. Encouragement is important because successful treatment takes time, hard work and commitment.

Approved By: Joree Ruiz, PA
Date: February 7, 2013
Office Phone: (414) 266-1569