

Topical treatment options:

مع تفريخ الحماض القادرة
مع التحكم بعوامل العلاج

benzoyl peroxide (non selective)

لوعادة
تجربتها

- Nonantibiotic antimicrobial agent →
- Kill bacteria by producing ROS Reactive oxygen species →
- It is reported to increase cell turn over, cleans pore, desquamate the skin, and has anti-inflammatory properties.

هو يشغل على قتل البكتيريا المسببة لـ acne (لهذا تصنيفه ↓) // لا يعتبر antibiotic لأنه لا يقتل البكتيريا
نتج الـ benzoyl peroxide ROS والتي تقتل البكتيريا
بجدران الخلايا البكتيرية وتقوم بعدها

میزان الـ benzoyl peroxide ←

Mainstay treatment of mild-to-moderate Acne often combined with antibiotics and/or retinoids

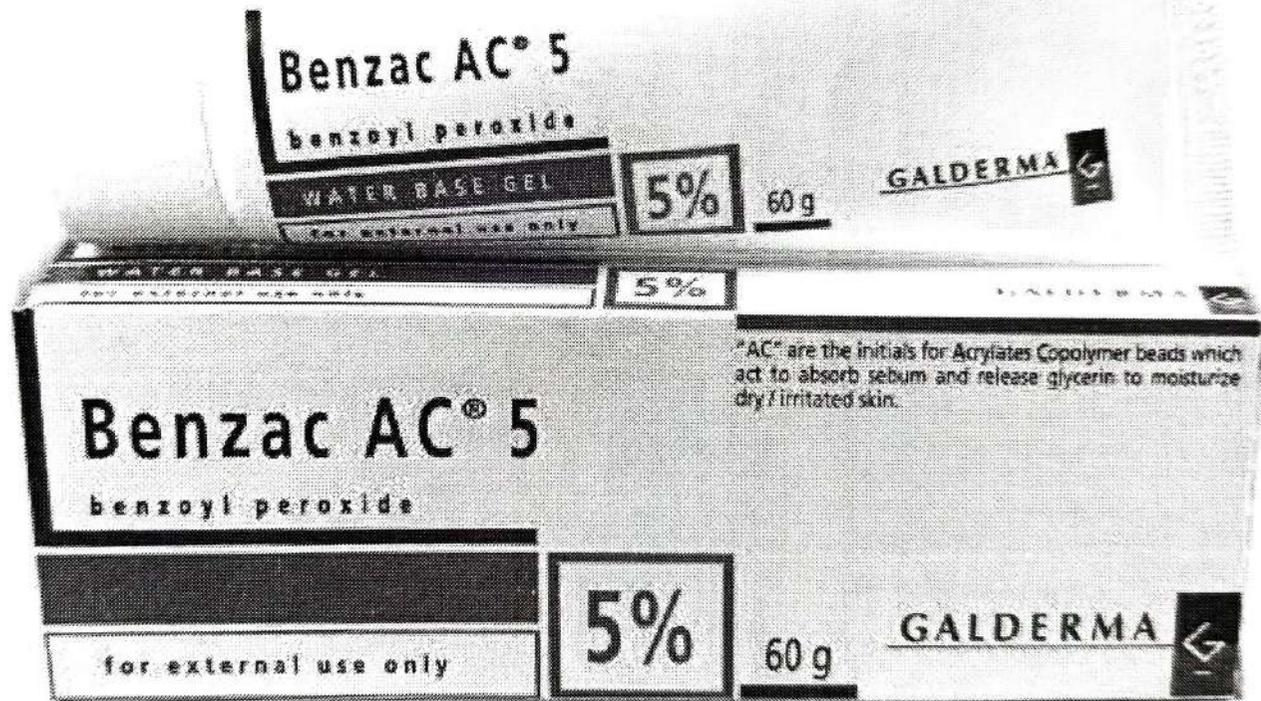
العلاج
الأساسي

- Available in OTC topical products in conc of 2.5-10%
- Side effects: peeling, dryness, burning, redness
- Irritation resolves with continued use during the first month of treatment
- Warn patient the BPO may bleach clothing, bedding, and hair

2.5%
5%
10%

الأعراض الجانبية بتدريج خلال أول شهر من استخدامها

لم لازم إنذار المريض لأنه يمكن تجنب تبييض الملابس
والفراش والشعر وتدريج الصبغة للأصفر



Topical treatment options: benzoyl peroxide

Comparing 2.5%, 5%, and 10% Benzoyl Peroxide on Inflammatory Acne Vulgaris

Otto H. Mills Jr. Ph.D., Albert M. Kligman M.D., Ph.D., Peter Pochi M.D., Harriet Comite M.D.

First published: December 1986 | <https://doi.org/10.1111/j.1365-4362.1986.tb04534.x> | Citations: 78

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Abstract

ABSTRACT: A 2.5% formulation of benzoyl peroxide was compared with its vehicle, and with a 5% and a 10% proprietary benzoyl peroxide gel preparation in three double-blind studies involving 153 patients with mild to moderately severe acne vulgaris. The 2.5% benzoyl peroxide formulation was more effective than its vehicle and equivalent to the 5% and 10% concentrations in reducing the number of inflammatory lesions (papules and pustules). Desquamation, erythema, and symptoms of burning with the 2.5% gel were less frequent than with the 10% preparation but equivalent to the 5% gel. The 2.5% formulation also significantly reduced Propionibacterium acnes and the percentage of free fatty acids in the surface lipids after 2 weeks of topical application.

لما عملوا دراسة وقارنوا فيها

بنزين ترايكنز من ال Benzoyl Peroxide

وصفوا فيه الترايكنز متساوية

بالفعالين لكن التركيز الاقل كان افضل

بالاخر ان الجانيك

* effective \rightarrow 2.5% = 5% = 10%

* side effect \rightarrow 2.5% = 5% < 10%

Conclusion \checkmark

Topical treatment options: benzoyl peroxide (bP)

دراسة مقارنة (bP) مع زيت شجرة التين

Original Article

A comparative study of tea-tree oil versus benzoylperoxide in the treatment of acne

لعمارة سمير باقر

Ingrid B Bassett MB BS, Ross St C Barnetson MD, FRACP, FACD, Debra L Pannowitz MSc (Biotech)

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✉ Reprints: Professor R St C Barnetson.

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Abstract

Tea-tree oil (an essential oil of the Australian native tree *Melaleuca alter-nifolia*) has long been regarded as a useful topical antiseptic agent in Australia and has been shown to have a variety of antimicrobial activities; however, only anecdotal evidence exists for its efficacy in the treatment of various skin conditions. We have performed a single-blind, randomised clinical trial on 124 patients to evaluate the efficacy and skin tolerance of 5% tea-tree oil gel in the treatment of mild to moderate acne when compared with 5% benzoyl peroxide lotion. The results of this study showed that both 5% tea-tree oil and 5% benzoyl peroxide had a significant effect in ameliorating the patients' acne by reducing the number of inflamed and non-inflamed lesions (open and closed comedones), although the onset of action in the case of tea-tree oil was slower. Encouragingly, fewer side effects were experienced by patients treated with tea-tree oil.

conclusion

- * effectivity in Treat acne → benzoyl peroxide = Tea tree oil
- * onset of action (سرعة التئيم) → " " " " " "
- * side effect → benzoyl peroxide > Tea tree oil

Topical treatment options:

2

Salicylic acid

التهيج فيه! انه ياد و يدخل لداخل
Skin, و يسبب بإزالة خلايا الجلد الميتة
anti-inflammatory + طبقات

An option for patient who cannot tolerate a topical retinoid due to skin irritation

حينه مناسب للمرضى التي ما بتحملوا استخدام ال retinoid
بجانب سبب ال irritation

As OTC: 0.5-2%

انترينج ان اعلى تكون ال efficacy
وغيرها

Side effects: skin dryness, scaling, itching → dissipate in a few weeks

مش ال benzoyl بنوعه ال اعراضه
مع ال استخدام

* علما دراسات ل SA على Rabbit ووليدوا انه بيحسن :-

- ① skin regeneration
- ② wound healing

ولا خطورة وده :-

- ① Mild skin irritation
- ② Peeling

* يفضل مع استخدام ال كامل بانه الخشخشة طبقات الجلد (وياد)



هنا يكون في نصيحة ما داسي وهي دونه ما تقبل حد كيكلة حيوان من هسا وبي مشكرا .

Topical treatment options:

3 Topical Retinoids (Rx only)

كانه ار acne بالاي
 وقتة يهرش shedding
 او تقشر يتجمع على
 بعض وتبس sticky
 وينجم مشاكل و acne
 له فرطية بعد
 من عملية تقشر
 البشرة .

1 □ Normalize the abnormal desquamation pattern in sebaceous follicles

2 □ Decrease the coherence of follicular keratinocytes استزدام او Retinoids بيمن على تقيد تماسك خلايا الجلد الميتة ذبالتالي ما تخ تجمع وتعمل الندار بالمسام

3 □ Prevent the formation of new microcomedones او micro comedones هي حالة بداية انداد المسام وتعمل comedones وتظهر او acne ← الرتينويدز بيمنع تشكيلها

4 □ Some have anti-inflammatory

□ Recommended for all cases of acne (except when oral retinoids are used) ما كذا او severe اتي ينظف نتم عنها oral retinoid

□ Mild noninflammaory comedonal acne may be treated with retinoid monotherapy severe acne (Black head + white head) متى بسكده بال علاج لوهو؟

* بال علاج البسطة بس تشكل inflammatory comedones ← بقدر استزدام عنها Topical retinoids لوهو ويكون فعال .

Topical treatment options:

قص زكول
 Noelules / cysts.
 Papula / pustula

Topical Retinoids (Rx only)

أول إشارات بتفسير هاد العملية :-
Retinol → Retinaldehyde → Retinoic acid

له يعني يرتبط بمستقبلاته RAR (Retinoic acid Receptor)

وبعدها يعطي مفعوله سواء بالتفسير

أو تخفيف الأوعية أو مضاد التهاب وغيرها.

* الحامض الفواكه بتثقل تفسيره على

* بيتا ر Retinoid ,, ,, deeply .

inflammatory lesions ← cysts / Abscesses / Pustula / pustula

□ When **inflammatory lesions** are present: **retinoids** are **combined** with **antimicrobial therapy** or **BPO** Benzoyl Peroxide

□ Topical retinoids can be used for maintenance therapy

□ Tretinoin, adapalene, tazarotene severe cases ← Topical Retinoid

□ Maximum benefits can be expected after 3-4 months of treatment

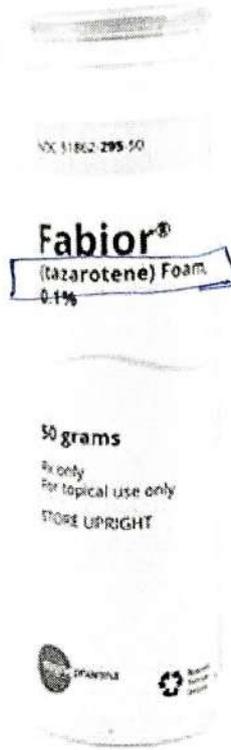
□ Liposomally encapsulated tretinoin is much better tolerated than gel (sustained release) → يكون امتصاصها أفضل و آثارها جانبية أقل

□ Tazarotene foam's tolerability is better than that of a gel

يعني الاختيار للنقطتين من ناحية الأفضلية كالمثال أعلى و آثارها جانبية أقل
 - Tretinoin → liposomal encapsulated > gel
 - Tazarotene → Foam's > gel

* من موجود بالسوق

↑ امتحان
↓ S.E
is the best



* حركة الكثرة هون عن ديش اسمه
Retinoid Palmitate

يكون شكل من أشكال ال Retinoid في الفرم
انه lipophilic بدون الحاجة الى
للبرة اسرع في امتصاصه في
وتهدئة أقل .

* وثمان حتى انه ال Retinoic acid → this is drug

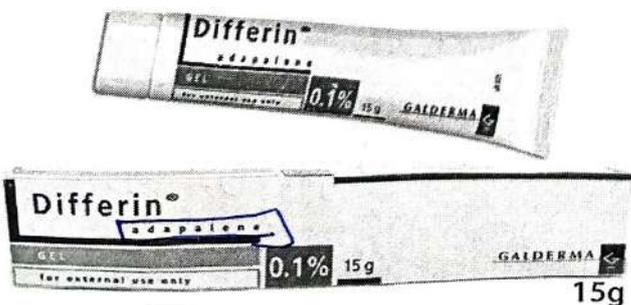
مثل ال Retinoin , adapalene ,
بربطوا دايرين بمستقيق ال Vit A
Retinol , Retinal
منه drug

Saja Hamed, Ph.D

Retinal أكثر
لم حسب الكفاءة التي سكتها سابقاً فـ 2 يكون
استقراراً وأقل تهيجاً له كـ تأثيره على
أضعف هذا

Retinal Retinoid acid
يكون ال Retinoid acid

⇒ Retinol → inactive form vit A
- Retinoic → active form vit A acid



Topical retinoids

أهم النقاط الأساسية باستخدامها
 Topical Retinoids

- 1 Conc??
- 2 How to use?
- 3 Effect of vehicle

تأثيره على علاج التهاب
 " علا أعراض البنية " → اختلاف (dosage form) →

* Conc?

مثلاً Ad Tretinoin موجود بتركيز
 0,025 to 1%

- started in low conc.
- lower conc. can be used for Mild and sensitive acne skin
- higher conc. can be used for severe acne

Saja Hamed, Ph.D

* how to use

أول أسبوع بتردده مرتين
 بالأسبوع وبعدها الأسبوع
 الثاني بمرتين يومياً
 ويومين 3، وبعدها بمرتين
 استمراره يومياً (تدرج)

1 cleanse

2 Apply (pea-sized)

3 Frequency

منها
 حكيماً
 بالتدرج

حبة البازلاء
 5 ثمن

دائرة جافة

rv

4 Moisturize → ينظف بكذا طريقة

is up to you ...

Topical treatment

Topical treatment options:

④ Topical antibiotics (Rx only) ^(inflammation present)

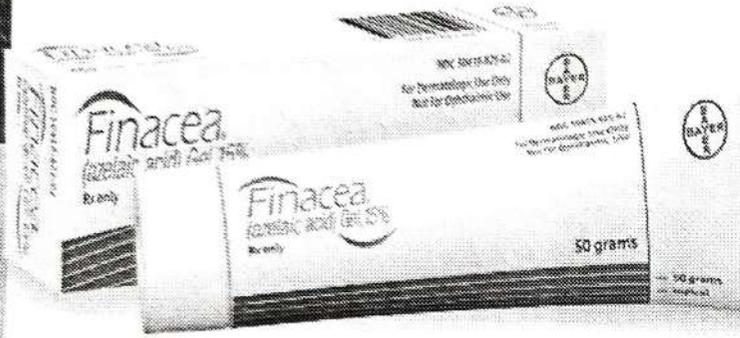
- They are used for mild-to-moderate acne when inflammatory lesions are present ^{من التهابات الجلد} (Papula, Pustula, Nodule, Cyst)
- Commonly used antibiotics: Clindamycin ①, erythromycin ② ^{مضاد حيوي}
- Antibiotics have bacteriostatic and anti-inflammatory properties ^{مضاد نمو}
- Antibiotic resistance is an important issue, therefore, antibiotic monotherapy and maintenance therapy alone are not recommended, nor the combination of oral and topical antibiotics ^{سبب مقاومة} ^{العلاج}
- Current guidelines recommend combining antibiotics with retinoids and/or BPO ^{تفادياً} ^{Best option!} ^{مضاد نمو} ^{resistance}
- BPO can minimize bacterial resistance, while retinoids can provide synergistic comedolytic and anti-inflammatory properties ^{فائدة} ^{العلاج}

← فائدة العلاج
الـ combination

Topical treatment options:

⑤ Azelaic acid

- ① An alternative to retinoids SA 21/10/20
- ② Has comedolytic, ②
- ③ antimicrobial, and anti-④ inflammatory properties
- ⑤ Not approved by the FDA in the USA



azelaic acid



⑤ خفضت من الالتهاب

⑥ safe for pregnant.

* Systemic) و نبتة و Topical) و نبتة

Systemic treatment

من سترنوم

- Recommended for patients with **moderate-to-sever** ^① acne
- Useful also in patients with **larger** ^② **surfaces** affected (neck, chest, and back)
- Systemic agents include: antibiotics, hormones, oral retinoids

←
أنته
على

دواء مضاد حيوي فموي لعلاج التهابات الجلد تقريباً ما يصفه طبيب الجلدية أو غيره؟

Systemic treatment

① Oral antibiotics (Rx Only)

inflammatory lesions

يوجد

Management of moderate to severe acne

Most commonly: doxycycline^①, minocycline^②, tetracycline^③, erythromycin^④

أفضل؟

Selection is driven by their side effects^① and patterns of P.acne resistance^②

بناءً على جوانبها

لا توجد بعض الأنواع تكون مقاومة أصلاً

A major problem affecting antibiotic therapy of acne is bacterial resistance

المشكلة العالمية

As with topical antibiotics, oral antibiotics should be combined with other agents to

نفس فكرة ال combination دوائي حكيماً بار

① minimize the development of bacterial resistance and improve treatment efficacy

Topical anti biotic

②

Systemic treatment

Oral antibiotics (Rx Only)

improve treatment efficacy.
Resistance

□ Oral antibiotics should be used with topical retinoids or BPO

استخدام تدريجي

□ Dermatologists usually recommend tapering off these medications (decreasing their doses) as soon as the symptoms begin to improve or as soon as it becomes clear that the drugs do not help

① Side effects: upset stomach, ② dizziness, ③ skin discoloration

□ Doxycycline can increase sun sensitivity

□ Tetracyclines can cause teeth discoloration

□ Minocycline can lead to skin hyperpigmentation

□ Prolong antibacterial therapy has resulted in the transfer of resistance to potentially pathogenic bacteria such as strains of staphylococcus or streptococcus species

□ Combine BPO to minimize development of resistance

حكيماها سابقاً

استخدام الطويل مع يزيد من انتقال وانتشار Resistance.

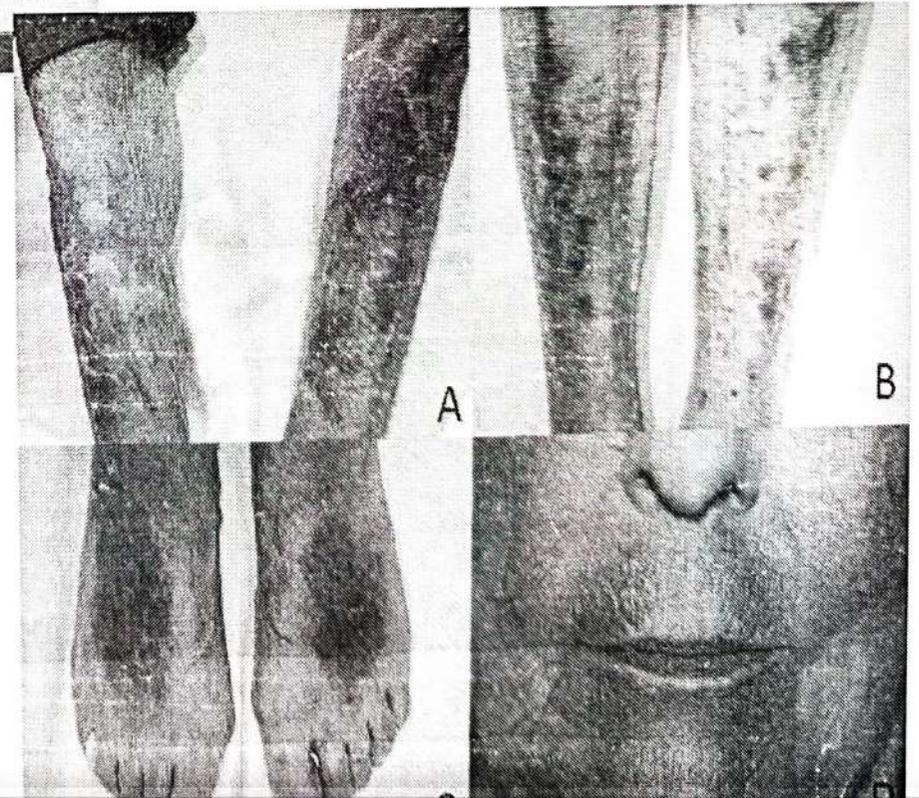
اعراض مشتركة
التي افضاها
بكل دواء

لازم
اخذها
ما يكون في
حسن

توبیکان کالہ اورال اور توبیکان کالہ
anti biotic سہولت

oral + Topical anti biotic
at the same time

Resistance سے بچنے کے لیے
بالزادہ



Systemic treatment

تبعاً فقط إنه تمنع ظهور
إني تكونت لظهورها سابقاً
new comedones
ما علاه علاه
ما علاه علاه

Adjunct Therapy

② Hormonal Therapy (Rx Only)

- Useful adjunct therapy in women with moderate-to-severe acne (أي أي systemic بترده)
- Beneficial for those who desire oral ① contraception or in whom traditional therapy has ② failed مفيد للنساء التي يستعملن موانع حمل فموية أو التي فشل معها علاجات أخرى
- Hormonal therapy may help reduce or prevent outbreaks, it is not effective for existing lesions therefore it is used as adjunct rather than a stand alone therapy نفسي ما حكيه غوف
- S.E: Headache ①, breast tenderness ②, nausea ③, ④ depression, risk of heart disease ⑤, high blood ⑥ pressure, blood clots ⑦

comedones

لا يفكرته إنه يقلل من إفراز الأندروجين Androgen فيها لتالي يقل إفراز sebum ويقل acne

Systemic treatment

oral Retinoids.

③ Isotretinoin (Rx Only)

Retinoid من تفرقوا بين عيزان او Retinoid
 او oral عن Topical مع اخط هالايين
 عالمين بار oral .

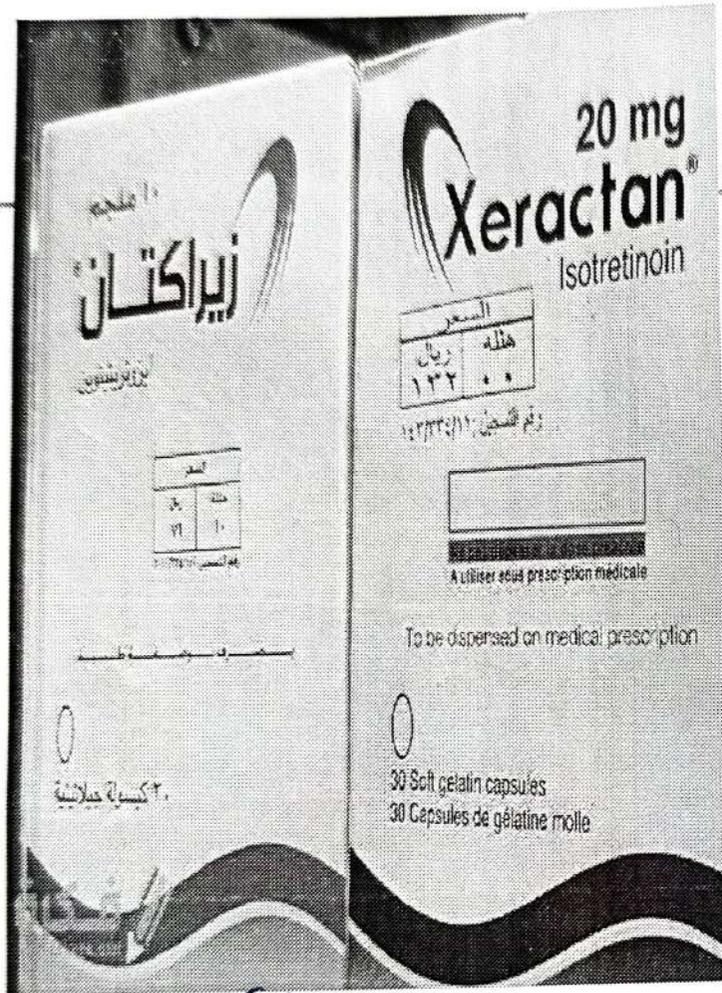
مثل الباي

- Sever acne and moderate acne that does not respond to other treatments
- Normalizes follicular desquamation, decreases sebum secretion, inhibits the growth of P.acnes, and exerts anti-inflammatory effects
- Side effects: dryness of the skin, eye, mouth, lips, and nose, itching, nosebleeds, muscle aches, sun sensitivity, poor night vision
- May increase level of TGs and cholesterol
- May increase liver enzyme levels
- Increased risk of depression and suicide.
- Teratogenic: recommendation to use two forms of birth control one month before starting treatment, during the treatment, and one month after the treatment

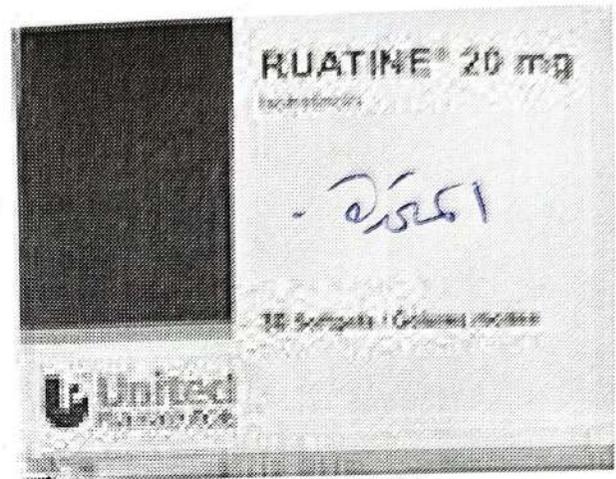
جفاف يكن في
 ودكة ونزيف برهو
 عن الجفاف وصلايح
 الصنود أكيد

كثير مهين
 و كازم يعمل هاد الغضن الكريف
 عن ما يبد في بال علاج في صلا

نضع باسند ام حيون منع الحمل قس شهر
 من العلاج وفضل العلاج ورجع العلاج برهو شهر
 لانه بيعد تسو هان .

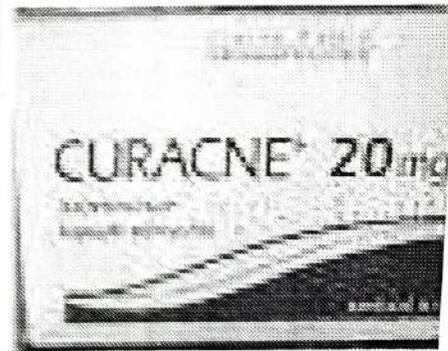
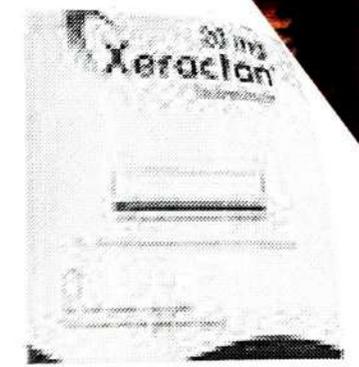
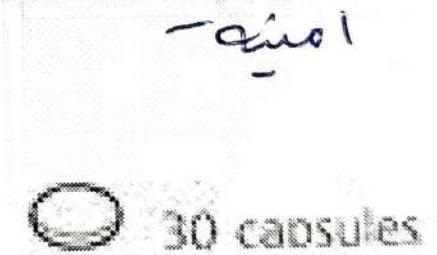


الكمية



Roaccutane Isotretinoin

20 mg



موجودين بعبارة
 10mg, 20mg, 40mg

Additional treatments

من العلاجات الإضافية وادوية لتخفيف الأعراض فقط .

التشخيص
الكيميائي

① **Chemical peels:** AHA and Salicylic acid peelings

بقره هوا
فيه ←

② **Comedone and extraction:** فارة زها زها بتشيل محتوياتها مكسام
المسدودة .

Two ways to release the contents of comedones:

طريقتين ممكنه مان
في إزالة الكوميدون بـ

① Squeezing with fingertips أصابع

② A comedo extractor أداة
معيه

في كندى أدلة محدودة هه
بتحكي إنه إزالة الكوميدون
ممكن يكون فعال لعلاج
حب الشباب

There is limited evidence that comedo removal for acne treatment is effective **but** it can improve patient appearance (enhance compliance with the treatment program)

فانستة
أه

تحسن من مظهر المريض ويمكن يتجوه يكون عال علاج .

Additional treatments

Optical therapies:

(A) Broad spectrum continuous-wave visible light (blue and red)

(B) Intense pulsed light

(C) Pulsed dye lasers

(D) Potassium titanyl phosphate lasers

(E) Photodynamic therapy (PDT)

(F) Pulsed diode laser

الضوئية

بالهوية اح تلاحظوا وجود تحسين

Although optical therapy may improve acne initially, a standardized treatment protocol, longer-term outcomes, comparisons with conventional acne therapies, and wide spread clinical experience are lacking

ما في دراسات كافية بتكفي عن فائدة استعمالها المقبول مقارنة بباقي العلاجات

Not included among first-line treatments

الدكتورة ما اهتمامت كثير بهاد الالايه بس انهم تعرفوا انه
ان optical therapy من ال
additional therapy انتم انتم بتابع acne

دا عرفوا الضوئية مع انه المتوقع مش هو مين

+ ما بتدعوا 5 first line اكيه

Additional treatments

Additional treatments

Herbal and alternative therapies:

- ✓ Aloe vera
- ✓ Fruit derived acids
- ✓ Tea tree oil
- ~~✓ Very limited data~~

ما هي الدراسات كافية
على

Treatment:

③ Increased sebum production *caus*

① □ Oral isotretinoin *oral*

② □ Hormonal therapies *oral*

Treatment:

Pr. acne

③ Propionibacterium acnes proliferation

① □ Topical and oral antibiotics topical + oral

② □ Benzoyl peroxide topical

③ □ Azelaic acid topical

Treatment:

① Inflammation ^{cases}

- ① □ Oral isotretinoin oral
- ② □ Topical retinoids topical
- ③ □ Oral tetracyclines oral
- ④ □ Azelaic acid topical
- ⑤ □ Salicylic Acid topical.

Acne treatment algorithm

كيف ونشرف

شعيرة بيضاء
حالة ك.ع.ع



	(Blackhead white head)	Mild non-inflammatory	Moderate		Severe
	Comedonal	Mixed and papular/pustular	Mixed and papular/pustular	Nodular*	Nodular/conglobate
1st choice	Topical retinoid	Topical retinoid + Topical antimicrobial*	Oral antibiotic + Topical retinoid +/- BPO*	Oral antibiotic + Topical retinoid + BPO	Oral isotretinoin Δ
Alternatives \diamond	Alternative topical retinoid or Azelaic acid \S or Salicylic acid	Alternative topical antimicrobial* + Alternative topical retinoid or Azelaic acid \S	Alternative oral antibiotic + Alternative topical retinoid +/- BPO*	Oral isotretinoin versus Alternative oral antibiotic + Alternative topical retinoid +/- BPO*/Azelaic acid \S	High-dose oral antibiotic + Topical retinoid + BPO
Alternatives for females \diamond	See 1st choice	See 1st choice	Hormonal therapy + Topical retinoid/ Azelaic acid \S +/- Topical antimicrobial*	Hormonal therapy + Topical retinoid +/- Topical or oral antimicrobials*	Hormonal therapy + Topical retinoid +/- Topical or oral antimicrobials*
Maintenance therapy	Topical retinoid		Topical retinoid +/- BPO		

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uptodate.com

بالأيدان الجاد رح يكون مكتوب نفس المكتوب باليد

The following concepts guide the selection of therapy

□ Topical retinoids are beneficial for both comedonal (noninflammatory) and inflammatory acne (Mild + Moderate)

□ Topical retinoids can be used as monotherapy in individuals with exclusively comedonal acne.

Black head
white head

Papules

بقعة ا comedonal
inflammatory lesion

و comedonal

Comedonal (noninflammatory) acne

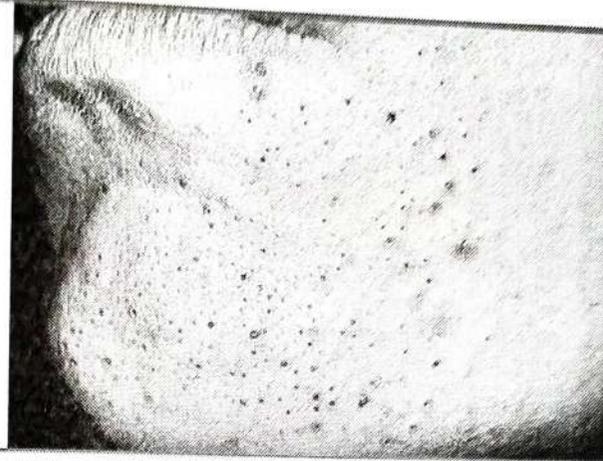
Mild (comedone)

مكون
الجلد
المتغير

- Topical retinoid
- alternatives include
 - ① azelaic acid and
 - ② salicylic acid

first choice

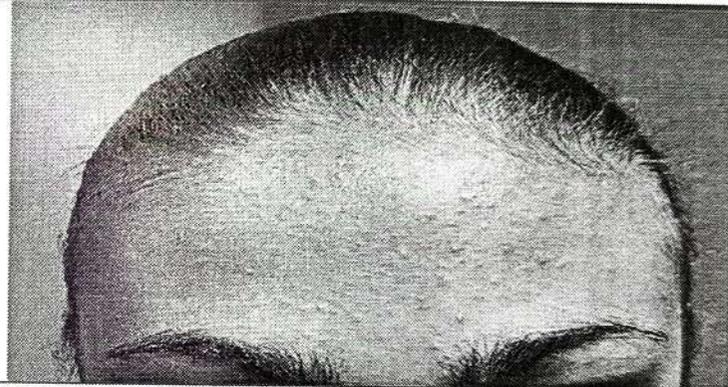
Noninflammatory acne



Numerous open comedones are present on the chin.

Reproduced with permission: Goodheart HP, Goodheart's Photoguide of Common Skin Disorders, 2nd ed, Lippincott Williams & Wilkins, Philadelphia 2003. Copyright © 2003 Lippincott Williams & Wilkins.

Mild acne



This 14-year-old girl has multiple closed comedones and scattered, small inflammatory papules and pustules on the forehead.

Courtesy of Douglas Hoffman, MD, Dermatlas: <http://www.dermatlas.org>.

Graphic 62816 Version 5.0

The following concepts guide the selection of therapy

□ Patients with an inflammatory component often benefit from antimicrobial therapies (eg, benzoyl peroxide or topical antibiotics).

□ Antimicrobial agents reduce the number of proinflammatory *P. acnes* colonizing the skin.

فأنت! ←

The following concepts guide the selection of therapy

□ Patients with moderate to severe inflammatory acne often warrant more aggressive treatment with oral antibiotics. ①

← الأكثر استخدامًا منه

□ Antibiotics in the tetracycline class are most frequently used

□ Therefore, use of benzoyl peroxide is recommended in patients receiving antibiotic therapy ②

Mild papulopustular and mixed (comedonal and papulopustular) acne

- Topical retinoid ✓
AND
- Topical antimicrobial (eg, benzoyl peroxide alone or benzoyl peroxide +/- topical antibiotic) ✓

Inflammatory acne



Erythematous papules and pustules are present.

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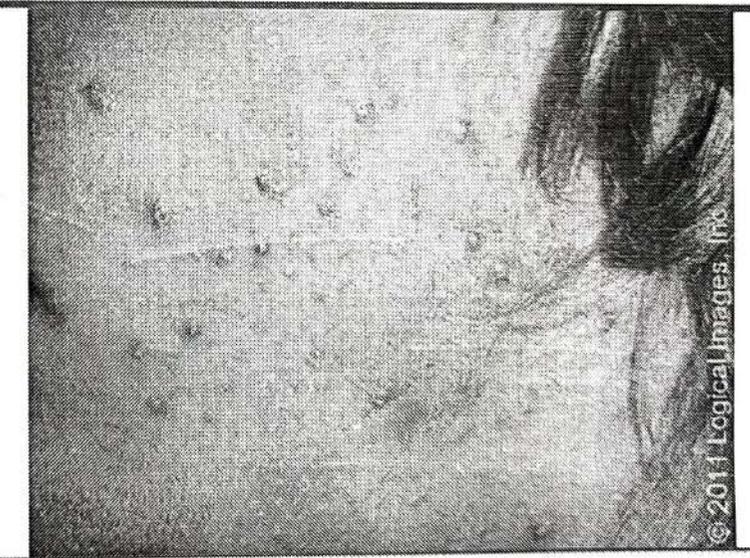
نفس الجوع

Moderate papulopustular and mixed acne

- Topical retinoid AND ✓
- Oral antibiotic AND ✓
- Topical benzoyl peroxide ✓

نفاذ
بهدون

Inflammatory acne



Erythematous papules and pustules are present.

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Moderate nodular acne (small nodules 0.5 to 1 cm)

- Topical retinoid ✓
AND
- Oral antibiotic AND ✓
- Topical benzoyl peroxide ✓

• ٤, ٥, ٦
• ٧, ٨, ٩

Inflammatory acne vulgaris



Inflamed papules, pustules, and small nodules on the face. Postinflammatory macular erythema is also present.

Severe nodular/conglobate acne

□ Oral isotertinoin

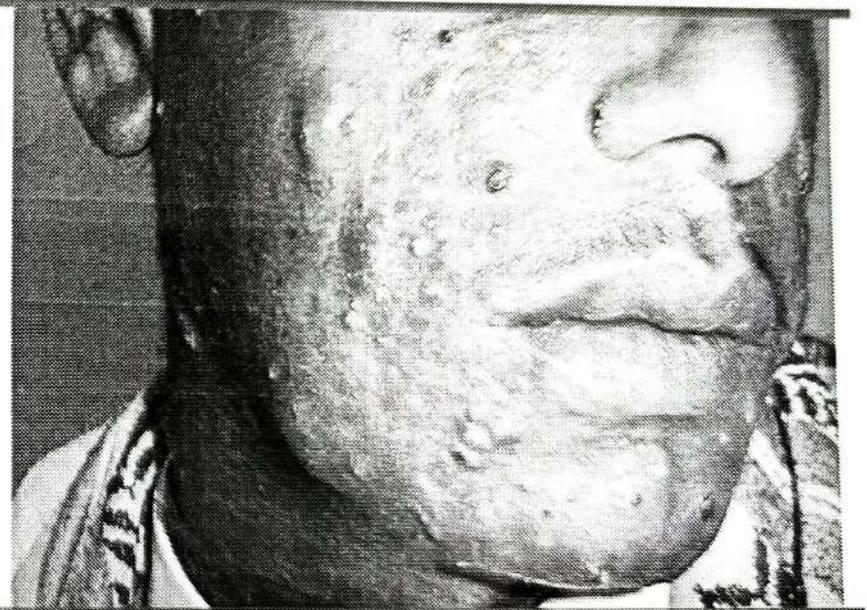
first choice

Acne nodules



Severe nodular acne on the forehead.

Cystic acne conglobata



This 22-year-old man with a two-year history of severe nodulocystic acne was treated with oral 13-cis retinoic acid.

A sample regimen for a patient with mild inflammatory facial acne who is using a topical retinoid, topical benzoyl peroxide, and topical clindamycin

- ① **Morning:** Wash face with a gentle facial cleanser. ② Apply a thin layer of a fixed-dose combination benzoyl peroxide/clindamycin gel to the entire face?.
- ① **Night:** Wash face with a gentle facial cleanser. ② Moisturize?.. Apply a thin layer ③ of the topical retinoid to the entire face.

حكيما! انه لما تستخدم كريم هيدرا سيود و ريتينويد بنفس الوقت
و بناتي الاعداد BP الصبح و ال Retinoid بالليل و بنظرة
ما نفس ههنا و كل مره (بالليل تبي)

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Wash → Apply (Morning)

Wash → Moisturize → Apply (Night).

A sample regimen for a patient with mild inflammatory facial acne who is using a topical retinoid, topical benzoyl peroxide, and topical clindamycin

Wash → Moisturize → Apply (Night).

A sample regimen for a patient with mild inflammatory facial acne who is using a topical retinoid, topical benzoyl peroxide, and topical clindamycin

لا تتركها
على وجهك

تريتينوئيد (retinoin)

□ Tretinoin and benzoyl peroxide should not be applied simultaneously to the skin due to the oxidizing effect of benzoyl peroxide on tretinoin.

ما لازم نستعملهم معا لأنه ال BPO يأكسد ال retinoin ويكسره و ما بتفيد منه

□ If both agents are prescribed, benzoyl peroxide should be applied in the morning and tretinoin in the evening

في صا انضطربية تستعملهم معا في الصباح وواحد بالليل

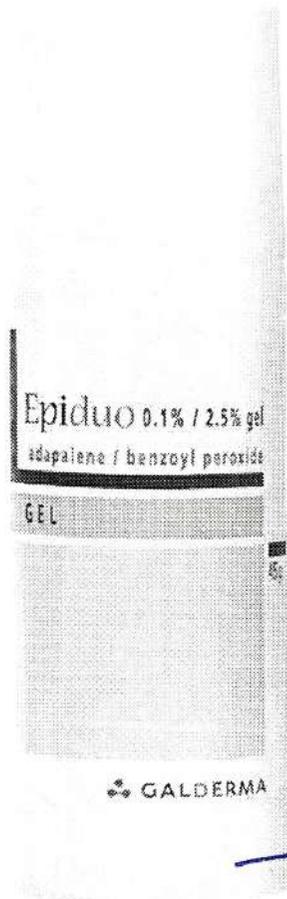
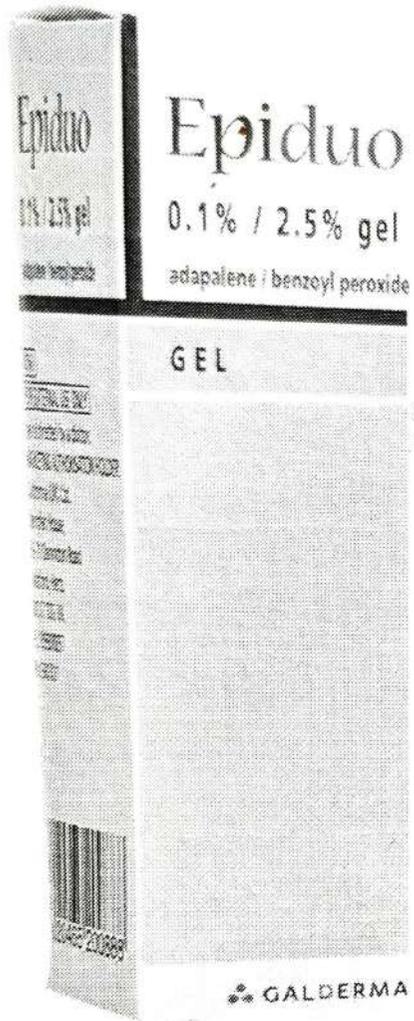
Adaplene

□ Adaplene, the microsphere formulation of tretinoin, and tazarotene are stable in the presence of benzoyl peroxide.

صا ال تركيبات

بقدر احظها مع ال BPO

لأنه ما يأكسدهم ويكسره مثل ال retinoin



ماہرہ کی
combination
Adapalene + BPO

stable

وہا جی ایڈ میں

وہوں میں ترقی نہ لاتی تھی

Ar Tretinoin + Adapalene

کی؟

+ اگر ہم ڈاؤن ہونے سے پہلے ہی سے شروع کریں تو
Ar Tretinoin کی وجہ سے ہٹا کر بوجھد نہیں
Ar Adapalene کی وجہ سے

الربع وكي او retinoid او بالاسه بوضوح الهمود كان
 Adapatene !

Topical Retinoids Considerations

- ① Gels have a drying effect, they may be preferred by patients with oily skin.
 لازم تقدر نعين
 في formula راج
- ② Creams and lotions tend to be moisturizing.
 for dry skin
 الـ cream او lotion راج
 vehicle راج
- ③ Solutions are drying but they cover large areas more easily than other preparations, and foams are easy to apply to hair-bearing areas.

- gels → oily skin
- cream → moisturizing (dry skin)
- solution → cover large areas.
- foams → hair-bearing areas

Topical Retinoids Considerations

□ Patients should be directed to apply a thin layer of a pea-sized amount of medication to cover the face. لازم يستخدم كمية صغيرة بحجم حبة البازيلاء

□ The medication should be applied to the entire affected area, not as spot treatment of individual lesions. ينطبق العلاج على المنطقة كاملة وليس بشكل نقطي
مكان ظهور الحبوب

□ Skin should be dry at the time of application وجود الكي اح يزيه الاضداد
لهيك يستعملها على بشره جافه

Topical Retinoids Considerations

- Topical retinoids cause irritation, dryness, and flaking of the skin, an effect most notable during the first month of therapy.
- To minimize irritation, patients should avoid the concomitant use of over-the-counter irritating products, such as harsh soaps, toners, astringents, and alpha hydroxy acid or salicylic acid products.

OTC - Irritating Product.

اللاية في بعد الاعراض الجانبية لـ Topical Retinoids وانه يتسبب في الاعراض

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٧٢

الشيء ~~بالتالي~~ يزيد من الاعراض

Topical Retinoids Considerations

- A gentle non-soap cleanser should be recommended. يفضل استخدام
- Delaying application of the retinoid for at least 20 minutes after washing and drying the face may also be helpful يفضل استخدام الكريم بعد مرور 20 دقيقة من غسل الوجه وتجفيفه
- If irritation is a problem, a decrease in the frequency of application to every other or every third night can be considered, and the frequency of application can be ⁽²⁾ increased as tolerance improves.

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في حال إنه كانت ا Irritation الشائكة هذا الاستخدام مشكلة
و تهيج كثير ← ف يمكن اقل مرات الاستخدام كل يومين أو ثلاثة
وبعدها يهر اقل المدة تدريجياً حسب تحمل المريض للأعراض .

٢٧

Topical Retinoids Considerations

- Tazarotene has been considered the most effective, but also most irritating topical retinoid, when compared with adaplene and tretinoin.

يُعتبر الأفضل مقارنة
بباقي Retinoid acid
لكن بيكون تهيج و أعراض أكثر منه

- A short-contact regimen with tazarotene: Patients apply tazarotene for up to five minutes daily, then wash off the medication

استخدامه فقط بوضعه على وجه
لمن دقائقه يومياً وبعدها يتم
غسله

Topical Retinoids Considerations

- The **fine skin flaking** that is often seen can be gently **exfoliated with a washcloth**.

بعد التقشير الناتج من استخدام هذا المنتج يمكن اسيل الجلد الزائد و المقتشر باستخدام قطعة قماش

- A **noncomedogenic facial moisturizer** can be applied if needed.

استخدام المرطب

- **Micronized tretinoin 0.05% gel** contains soluble **fish proteins**. The drug should be used with **caution in patients with a known allergy to fish**

لازم نتأكد إذا هذه
مادة هذا علاج
قبل الاستخدام

TOPICAL ANTIMICROBIALS

هناك تركيز وكيفية بالاساس

□ **Benzoyl peroxide:** Concentrations of benzoyl peroxide that are higher than 2.5% may not contribute to increased benefit.

التركيز الأعلى لا يعني مفعول أفضل

□ Increased concentrations of benzoyl peroxide can lead to increased skin irritation.

التركيز الأعلى قد يزيد من التهيج

□ Irritation may appear as erythema, ①

② scaling, xerosis, or stinging, tightening, or burning sensations ④ ⑤ ⑥

TOPICAL ANTIMICROBIALS

- Patients should also be advised that benzoyl peroxide can cause bleaching of the hair and clothing. دکینا
- Antibiotics may promote the appearance of resistant strains of *P. acnes* when used alone. Resistance is diminished by combination use with benzoyl peroxide

معاہدہ دیکھی ہو

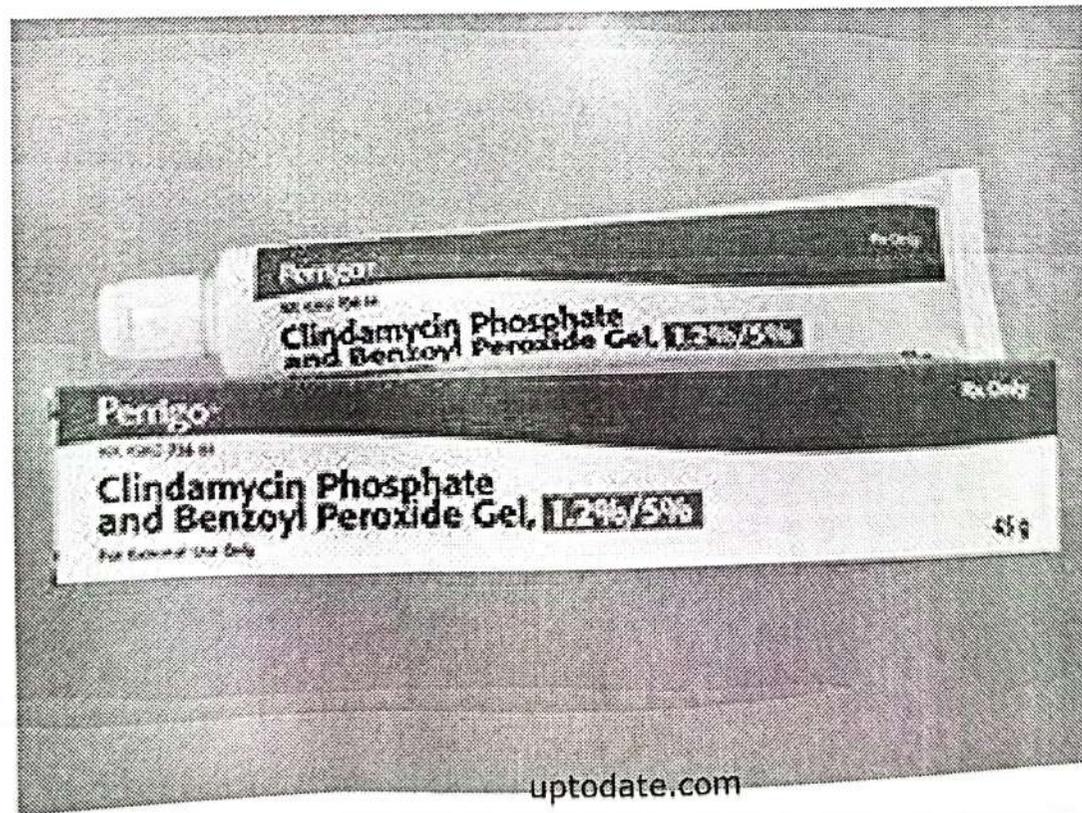
Topical antibiotics

- Topical erythromycin and clindamycin should not be used as monotherapy for acne *because Resistance*
- Evidence shows better treatment efficacy when these drugs are combined with retinoids and benzoyl peroxide. *oral*
- In addition, the use of benzoyl peroxide with antibiotics decreases the occurrence of bacterial resistance

ما هي دوائه

Topical antibiotics

- Combination gels containing benzoyl peroxide combined with an antibiotic are available



AZELAIC ACID

- ① Azelaic acid: antimicrobial, comedolytic, and mild anti-inflammatory properties. ② ③
- ② Azelaic acid also has an inhibitory effect on tyrosinase and can improve acne-induced postinflammatory hyperpigmentation.
- ③ The product is available in a 15% gel and 20% cream.

أزلايك أسيد
للتهيجات الجلدية
acne & in

ORAL ANTIBIOTICS

هو الدواء

□ Utilization of these drugs is primarily indicated for patients with moderate to severe inflammatory acne. ①

□ Oral antibiotics may also be used for patients who have milder truncal acne, for whom the application of topical antibiotics is difficult. ②

هو الدواء
Topical) هو الدواء

ORAL ANTIBIOTICS

Resistance

GI side effect

Tetracyclin / تتراسايكلين / تتراسايكلين / تتراسايكلين

- The use of erythromycin is now recommended only for patients in whom tetracycline derivatives are contraindicated.
- It has less anti-inflammatory activity than the tetracyclines.
- In addition, *P. acnes* often develops resistance to this drug, resulting in treatment failure.
- Many patients experience intolerable gastrointestinal side effects.

Tetra / تتراسايكلين

المسكنة
التي
تستخدم

سكنة
التي
تستخدم
gi
s.e

ORAL ANTIBIOTICS

- studies have found an increased rate of upper respiratory infections in acne patients treated with oral antibiotic therapy
- greater risk for upper respiratory infection among acne patients treated with either topical or oral antibiotics

Acne / التهاب الجلد
Topical/oral
antibiotic
therapy * وجدنا زيادة في التهابات الجهاز التنفسي

كانوا عرضة أكثر من غيرهم للإصابة بال
respiratory infection

The following practices may reduce the incidence of resistance

هو نعمل كذا نفلر من مقاومة
ال resistance في

بوصفة عند الضرورة

- ① Only prescribe antibiotics when necessary
- ② The duration of treatment should be limited; an oral antibiotic should be discontinued when there is no additional clinical improvement or clinical improvement is absent
- ③ limit treatment courses to a maximum of 12 to 16 weeks when feasible.

استدائه لفترة محددة وينوقفه
إذا لاحظنا كسب أو ما عي
كسب

فترة الا استخدام

ش
ر
ع
ا
ف

The following practices may reduce the incidence of resistance

- Do not simultaneously treat with a topical antibiotic and an oral antibiotic

topical + oral at same time X

- Avoid use of antibiotics (topical or oral) as monotherapy or as maintenance therapy

→ topical + oral p.i. -
all use 2.8.85 " " -
Maintenance 3 " " -

ORAL ISOTRETINOIN

- effective for the treatment of ^① severe, ^{موتى بسؤرته} recalcitrant nodular acne. ^②
- In clinical practice, it is also used for ^③ milder acne that is resistant to other treatments or associated with significant scarring. ^④
- Oral isotretinoin is used as monotherapy; ^{as topical retinoid} a typical treatment course is 120 to 150 mg/kg, which usually translates to a 20-week course for most patients.

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الجرعة
مطلوبة

٨٩

120 - 150 mg / Kg for 20 week



iPLEDGE™

Committed to Pregnancy Prevention

Have Questions? Call our toll-free number 1-866-495-0654
Monday to Saturday, 9 AM - 12 AM (Midnight) ET

THE ONLY WAY



HOME



PATIENT INFORMATION



ABOUT ISOTRETINOIN



ABOUT iPLEDGE



PRESCRIBER INFORMATION

Find a Participating Pharmacy

FAQs / How to's

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About Isotretinoin

Information previously noted:

If pregnancy does occur during treatment of a female patient who is taking isotretinoin, isotretinoin must be discontinued immediately and she should be referred to an Obstetrician-Gynecologist experienced in reproductive toxicity for further evaluation and counseling.

Special Prescribing Requirements

Because of isotretinoin's teratogenicity and to minimize fetal exposure, isotretinoin is approved for marketing only under a special restricted distribution program approved by the Food and Drug Administration. This program is called iPLEDGE™. Isotretinoin must only be prescribed by prescribers who are registered and activated with the iPLEDGE program. Isotretinoin must only be dispensed by a pharmacy registered and activated with iPLEDGE, and must only be dispensed to patients who are registered and meet all the requirements of iPLEDGE.

INDICATIONS AND USAGE

Severe Recalcitrant Nodular Acne

Isotretinoin is indicated for the treatment of severe recalcitrant nodular acne. Nodules are inflammatory lesions with a diameter of 5 mm or greater. The nodules may become suppurative or hemorrhagic. "Severe," by definition, means "many" as opposed to "few or several" nodules. Because of significant adverse effects associated with its use, isotretinoin should be reserved for patients with severe nodular acne who are unresponsive to conventional therapy, including systemic antibiotics. In addition, isotretinoin is indicated only for those female patients who are not pregnant, because isotretinoin can cause severe birth defects.

A single course of therapy for 15 to 20 weeks has been shown to result in complete and prolonged remission of disease in many patients. If a second course of therapy is needed, it should not be initiated until at least 8 weeks after completion of the first course, because experience has shown that patients may continue to have acne while off isotretinoin. The optimal interval before retreatment has not been defined for patients who have not completed skeletal growth.

ملاحظة: iPLEDGE ← FDA الأمريكية لضمان
استخدام Isotretinoin بطريقة آمنة لتقليل تشوهات الجنين
فترة الحمل.

<https://www.drugs.com/dosage/isotretinoin.html>

HOME SKIN CARE RECOMMENDATIONS

- Patients should apply a gentle synthetic detergent cleanser (i.e, syndet) with their fingers, and rinse with warm (not hot) water twice daily.
- Synthetic detergent bar^s uses exhibited less skin peeling, dryness, and irritation than soap.

Moisturization and acne

محتضر الحارين
المكروبيات

□ Swinyer et al. identified skin dryness as an important factor in exacerbating the pathogenic cycle of acne, thus hampering its treatment

الجفاف يزيد من acne

□ Jackson (1999) found that an emollient facial wash to outperform pure soap and a benzoyl peroxide wash in decreasing open comedones and papules

الترطيب

□ Hydrate while cleanse استخدام الترطيب بعد الغسول

□ Use an emollient facial cleanser

استخدام غسول مرطب

HOME SKIN CARE RECOMMENDATIONS

□ Water-based lotions, cosmetics, and hair products are less comedogenic than oil-based products.

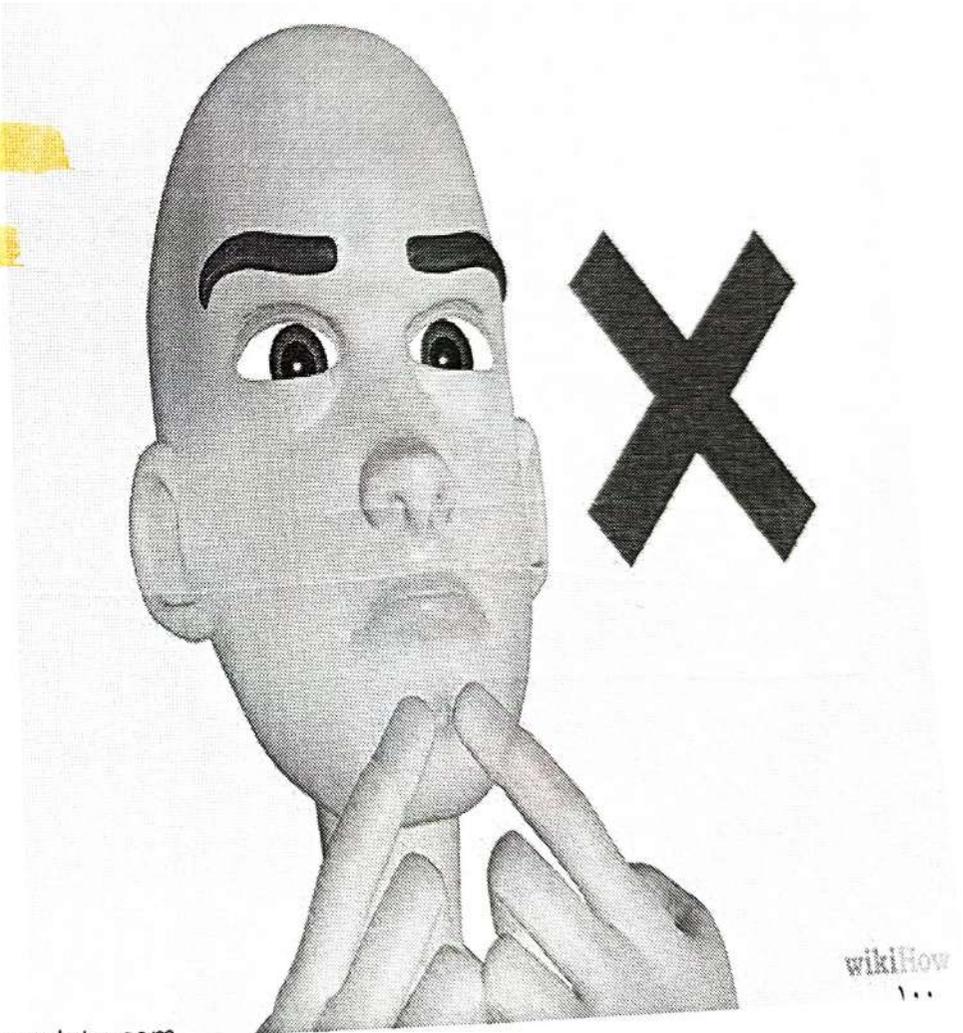
□ Patients should be encouraged to seek out noncomedogenic skin care and cosmetic products.

oily) → water-based) لا ، patients with
acne) → non comedogenic mix

HOME SKIN CARE RECOMMENDATIONS

- Patients should be advised **not to pick their acne lesions,** as this may **exacerbate scarring**

ما تلعب بايديك على حبباتك
لانه قد يتسبب في
تلف الجلد



HOME SKIN CARE RECOMMENDATIONS

- Patients should be given realistic ^{توقع حقيقي} expectations regarding timelines for improvement.
- **At least two to three months** of consistent adherence to a therapeutic regimen is often necessary prior to concluding that treatment is ineffective.

ما تركز عالمنا بفترة العلاج بأنه أحياناً ممكن
تحتاج أسبوعين

PREGNANCY AND ACNE THERAPY

علاج حب الشباب خلال فترة الحمل -

- If acne therapy is desired, reasonable options include oral or topical erythromycin, topical clindamycin, and topical azelaic acid, which are pregnancy class B drugs
- Benzoyl peroxide is categorized as pregnancy class C

class
B

Tips for Skin care:

- Facial Cleansing should be done gently.
- Vigorous rubbing and scrubbing may worsen the acne.
استخدم الغسول بلطفية نه الغراء
يزيد ال Acne
- Use an emollient facial cleanser or a mild soap.
استخدم منظف مرهف
- If the skin becomes red, irritated or scaly while using a certain soap another more gentle type should be tried.
إذا الحسنة من الغسول استخدم غيره.

Tips for Skin care:

العناية بالنقاط
مما تكسبه كثير

- The skin should not be touched very often
- People who squeeze or pinch their blemishes may develop scar
- Men who have acne should find out whether an electric razor or blade razor is more comfortable
- If you are using a wet-shaving technique, be sure to adequately soften the beard with warm water and shaving cream for at least a minute or two before you start to shave and allow enough time to shave lightly and carefully

Shaving and Acne

- No one method of shaving is best for patients with acne
- Some men find blade shaving more comfortable, while others prefer electric shavers
- Sometimes it's more comfortable to rotate between the two
- A few individuals most stop shaving at least temporarily
- Try to avoid daily shaving

Tips for Skin care:

- ❑ Choose cosmetics carefully. All cosmetics, such as foundation, blush, eye shadow, and moisturizer should be oil-free or non-comedogenic
- ❑ Lip products that contain moisturizers may cause small open and closed comedones



THANK YOU

Done by Mariam Yacoub