

Pre-registration Pharmacist Training: ECZEMA

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Disclosures

(honoraria and speaking engagements)

- Abbvie
- Bioderma
- Boehringer-Ingelheim
- Galderma
- GSK
- Hoepharm
- Hyphens
- Janssen-Cilag
- Leopharm
- LF Asia
- L'oreal
- Menarini
- Merck-Serono
- MSD
- Mundipharma
- Neutrogena
- Novartis
- Pfizer
- Roche
- Sanofi

What is eczema (= dermatitis)?

Inflammation of the skin caused by a variety of internal and/or external stimuli in persons with irritable skins.



Eczema



Endogeno
us

Exogenou
s

Photosensitivity (Treatable and reversible)
Photo contact dermatitis



Eczema



Endogeno

Exogenou

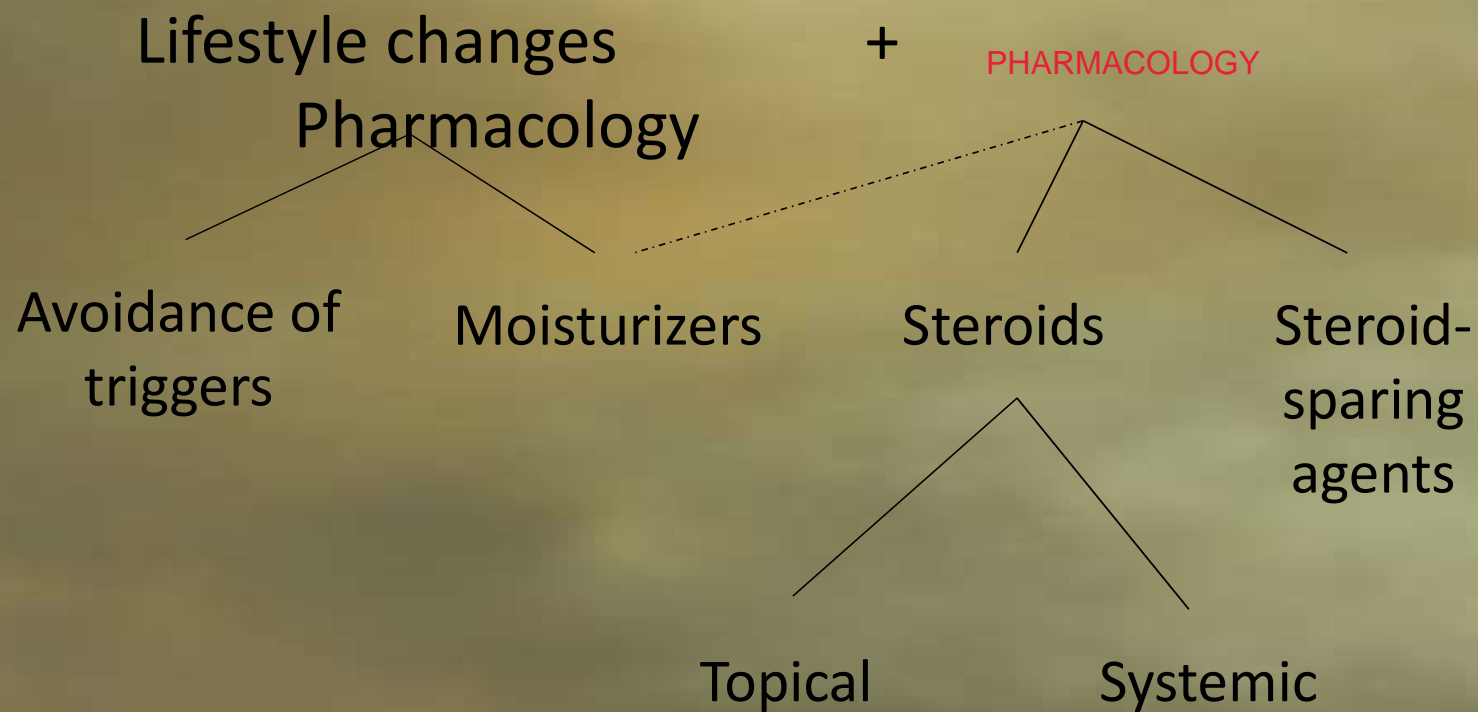
us

s



Endogenous: Atopic: Sensitive (Asthma, Eczema, allergic rhinitis) For our age tend to go to flexures (Areas where its folded, knees, elbows, neck)
Discoid: Looks like discs, oval islands
Astitotic eczema: affects older people (in wriggly wriggly lines, they are due to dry skin)
Seborrhaic dermatisi: The oily areas of the skin (due to stress and oil -may have dandruff as well)

General management of eczema



In eczema the skin barrier is affected . so must moisturise.
Now we got topical steroid-sparing agents (Tacrolimus, calcineurin inhibitors)

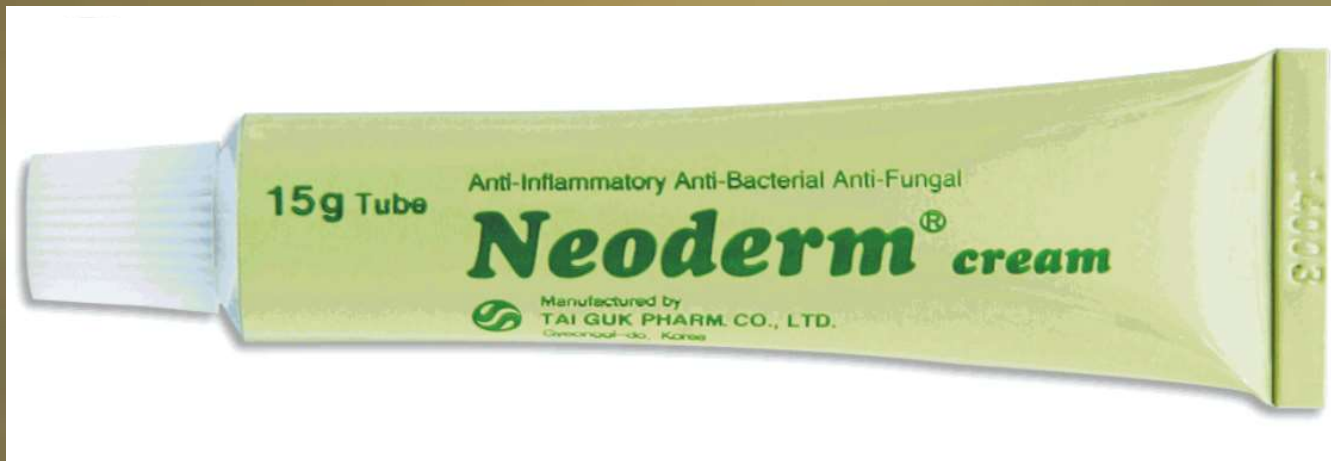
Potency Ranking of TCS

| American | British | Steroid |
|----------|-------------------|--|
| I | Very potent | Clobetasol prop. 0.05% cr/oint/lotion |
| II | Potent | Bet. Diprop. 0.05% oint |
| | | Momet. Furoate 0.1% oint |
| III | | Bet. Diprop. 0.05% cr Fluticasone prop. 0.005% oint |
| IV | Moderately potent | Momet. Furoate 0.1% cr/lotion |
| | | Hydrocortisone aceponate 0.127% cr |
| V | | Bet. Val 0.1% cr Fluticasone prop. 0.05% cr |
| VI | Mildly potent | Bet. Val 0.05% cr Desonide 0.05% lot/cr |
| VII | | Hydrocortisone 1% cr |

Betamethasone dipropionate 0.025% should be around class 4
 Lotion and cream similar, but if ointment then it will be much stronger.
 Bet valerate 0.1% ointment (Add 2 class - affects potency alot)

QUIZ

What is the steroid potency class of this product?



ELosone 0.1% ointment: Mometasone fuorate0.1& ointment is class 2

Considerations in TCSUse

1. Is it really eczema?



fungus, dont give steroid!

With steroids, it will mask the sx (reduce the inflammation)
but it will actually worsen after wards (Change appearances of the rings ->
no longer rings after that) - confusing



For kids, maybe use a weaker one

Considerations in TCS Use

1. Is it really eczema?
2. Who has the eczema?



Consider age

For thinner skin areas, use a weaker steroid
We use hydrocortisone or betametasone 0.025%

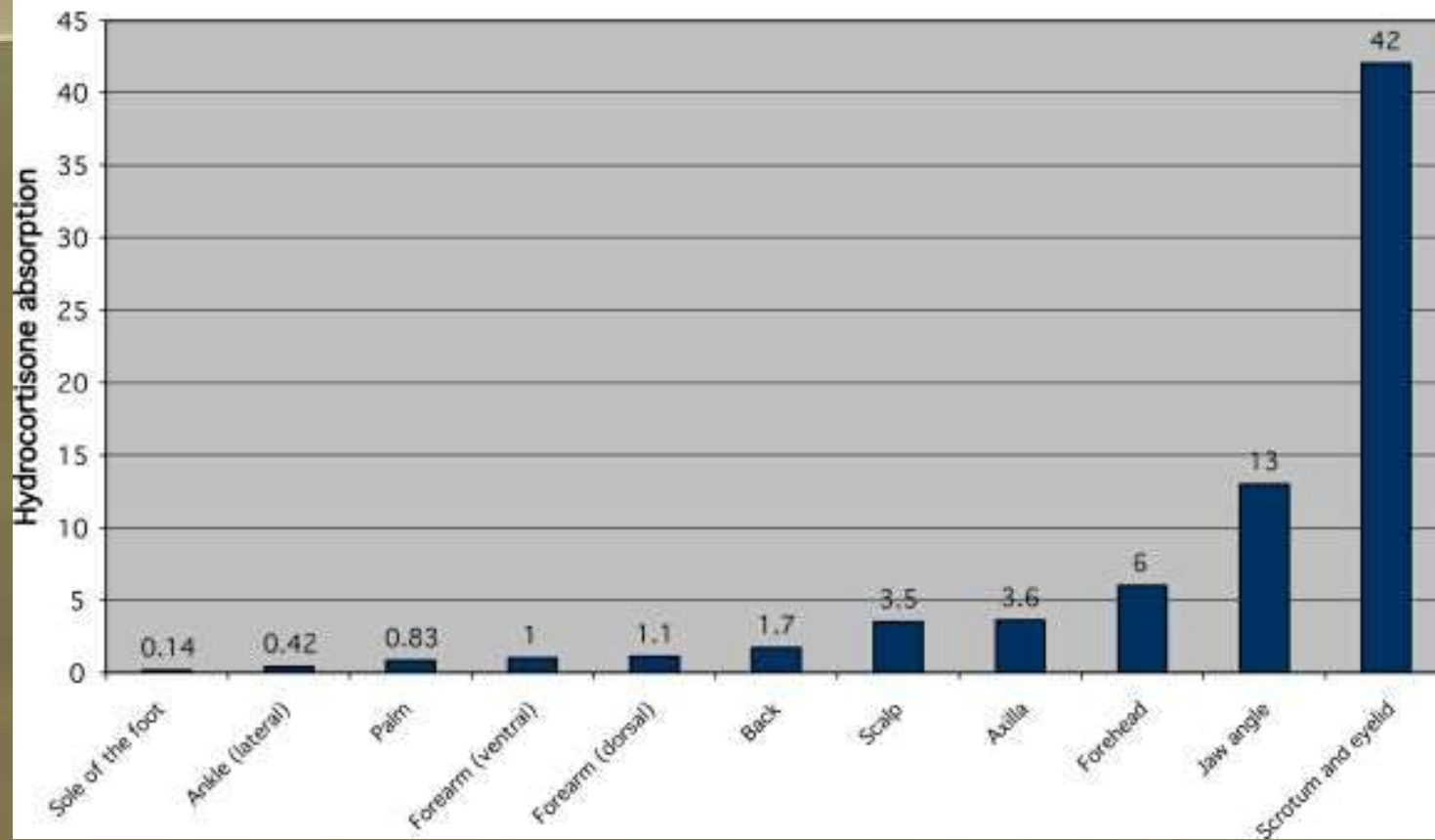
Considerations in TCS Use

1. Is it really eczema?
2. Who has the eczema?
3. Where the eczema?



Consider thinness

Regional Variation in the Percutaneous Penetration of Hydrocortisone in Man



If areas are hairy,, use lotion or gel dosage form instead

Considerations in TCS Use

1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?



Consider hairyness

Folds and just small areas- > can just use over there
use a weaker steroid if very extensive, use cream and lotion - easier to spread and abit will be absorbed

Considerations in TCSUse

1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?



Consider extent

Considerations in TCSUse

1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?
4. What is the stage of the eczema?

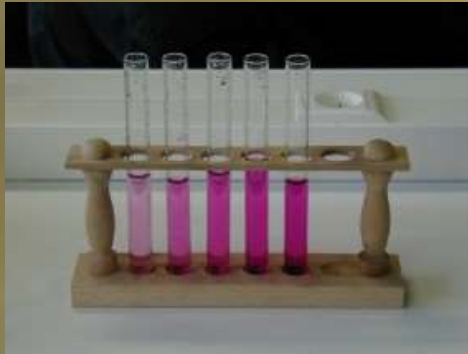
Dry it up instead of using steroid.
Use potassium permanganate to dry it up. put in the gauze and pat it on the affected area. rinse again then pat it again in the morning then at night also (10 times) will dry up in 2-3 days. Then you can put your steroid cream.



© 2000 Galderma SA

040028V

PP compresses/soaks/wash



Considerations in TCSUse

1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?
4. What is the stage of the eczema?

CHRONIC



It's so dry and thick -> you gotta use a steroid ointment! and stronger (if not cannot absorb in)

Considerations in TCSUse

1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?
4. What is the stage of the eczema?



Thick and flare, features of both, subacute eczema -> a cream will be useful

QUIZ

What is the stage
of this eczema?



So DRY and thick and have cracked up

Considerations in TCS Use

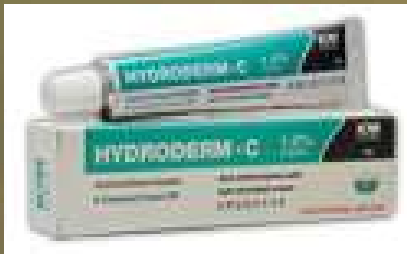
1. Is it really eczema?
2. Who has the eczema?
3. Where is the eczema?
4. What is the stage of the eczema?
5. Is the eczema complicated?



impetigo: infected eczema (with antibiotics)

Consider combo with antimicrobial

With anti-infectives



Cracked and very very thick.
use those with keratolytic agents : Keratin (dont put the salicylic acid into the cracks) use maybe paraffin instead
BEPROSALIC or diprosalic . Betamethasone dipropionate 0.05% and salicylic acid



Consider combo with keratolytic



Skin thinning and formation of striae (Stretch bands) telangiectasies and pupura

QUIZ

This patient has a
rash on



itchy
the skin.



pupura, blood clots under the skin cause vessels burst



Factors affecting devt of S/Es

- Potency of steroid
- Amount of steroid used
- Length of time of steroid use
- Integrity of skin
- Area of body treated
- Occlusion increases the potency by 100 fold

Wet Wrap Dressing for Extensive Eczema



Tubifast holds dressings securely, without constriction or compression.

The light elasticity allows patients complete freedom of movement.

Tubular presentation – no requirement for pins or tape.

A variety of lengths are available, ensuring cost effectiveness by minimising waste.

Quick reference colour coding, to fit everything from small limbs to large adult trunks.

Quick and easy to use: cut to size and stretch over the dressing for an even, non-constrictive fit.



Need to prepare the bandages
put steroid cream - moisturisers- put the first moistened layer of the dressing - then put the dry 2nd layer on top.

Tubifast – application is quick and easy



1 Tubifast is a unique lightweight conforming stockinette which can be used for dressing retention in Dermatological areas or as an undercast stockinette. To apply Tubifast all that is needed is a pair of scissors and a pair of hands. Simply cut off the required length.



2 Stretch the piece of Tubifast over the hands and over the affected limb if securing a dressing. If limb coverage is required the Tubifast is simply pulled or rolled on as a stocking.



3 The Tubifast covers the dressing and gives it a light even, non-constricting pressure. It may be applied in a double layer especially over joints for extra security, or the edges may be tucked under. Which ever method is used Tubifast is quick, easy, comfortable, it will stay in place and is non-constricting.









we dont have topical ciclosporine cause it doesnt work that well

pimecrolimus

tacrolimus

| | | |
|-------------------------------------|--|---|
| Topical Calcineurin Inhibitor (TCI) |  |  |
| Vehicle | Cream | Ointment |
| Formulation | 1% | 0.03%, 0.1% |
| Age indication | ≥ 2 yrs | ≥ 2 yrs (0.1% for ≥ 16 yrs) |

class 7

class 5!

10g for \$60-70, very expensive, for limited areas, eyelids or orifices (limited areas and sensitive skin wont skin thin)

Topical
Calcineurin
Inhibitor
(TCI)



Vehicle

Cream

Ointment

Formulation

1%

0.03%, 0.1%

TCS
equipotency

Class VII

Class V

Price

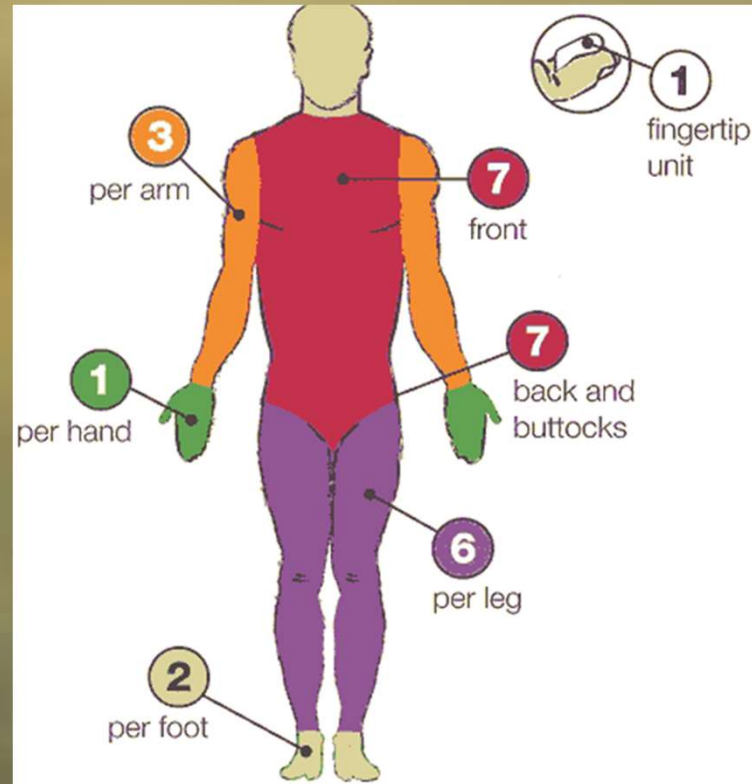
~\$60-70

~\$60-70

ONE fingertip for ONE palm size. apply until its gone.
use BD
EXCEPT mometasone fuorate and fluticasone fuorate for those

Steroid concerns

- How much to apply?



All use BD EXCEPT fluticasone propionate AND mometasone fuorate

Steroid concerns

- When do I apply?

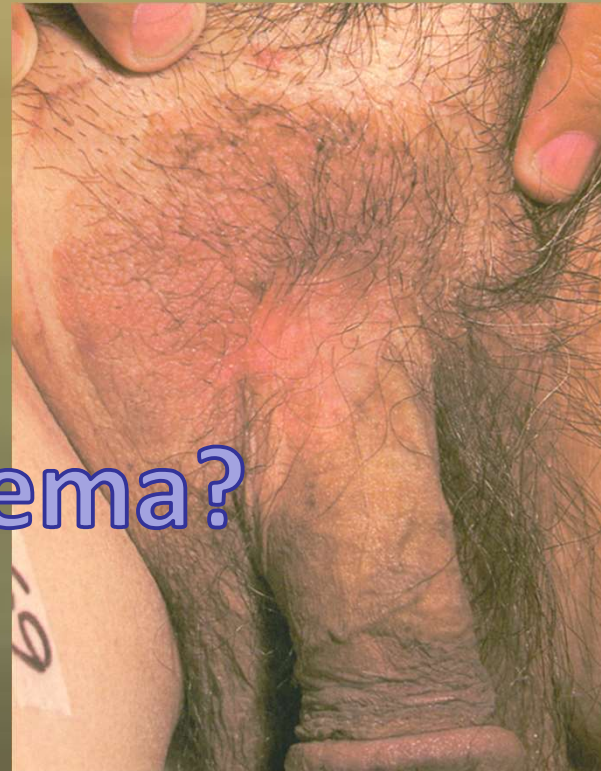


allergic to steroid?

Steroid concerns

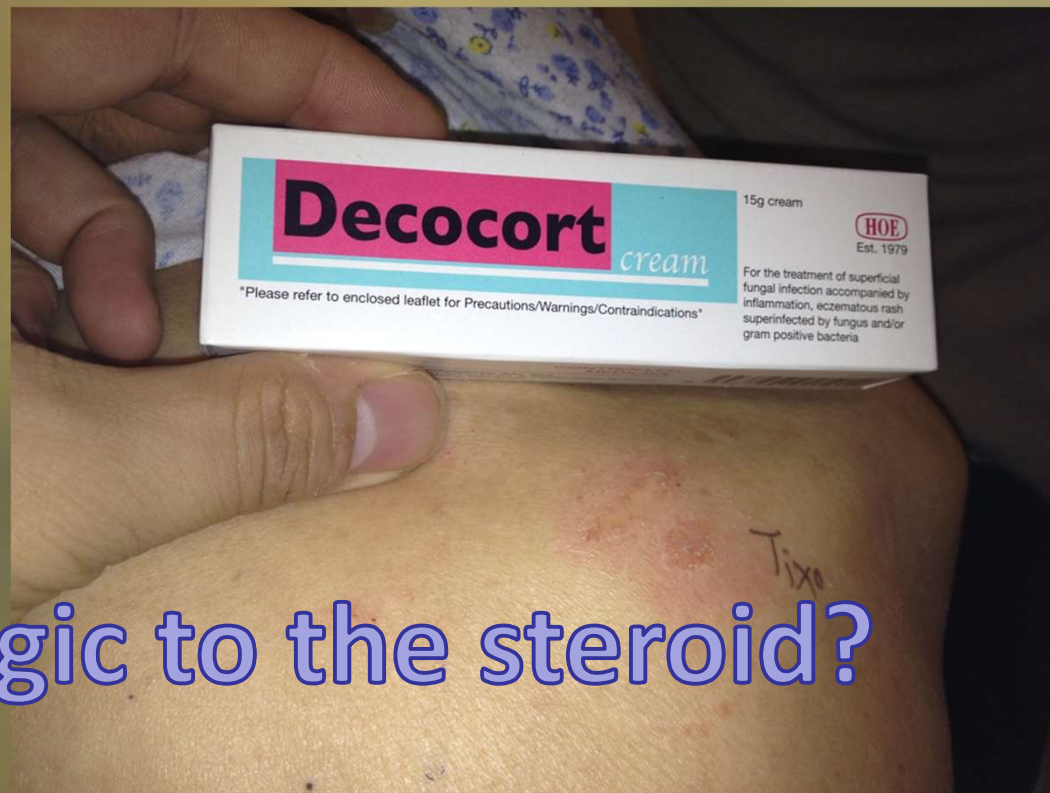
- I applied, and it got worse!

Maybe it's not eczema?



Steroid concerns

- I applied, and it got worse!



Maybe allergic to the steroid?

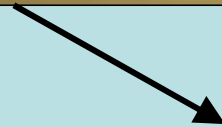
Clearance of lesions --> stop or taper off TCS -> reappear --> Restart LAST TIME is abd (round and round)

Common Steroid concerns

- I applied, it improved; I stopped, it returned

Traditional teaching

Clearance of lesions



Pro-active maintenance strategy

Predefined long-term,
low-dose TCS in combination with
liberal moisturizing, and predefined
appt schedule for follow-up

After treat with steroid cream and rashes gone, switch to a maintenance regime once its gone + alot of moisturizing. put same cream on same spot TWO times a week. use for about 2 months or so then you can stop .

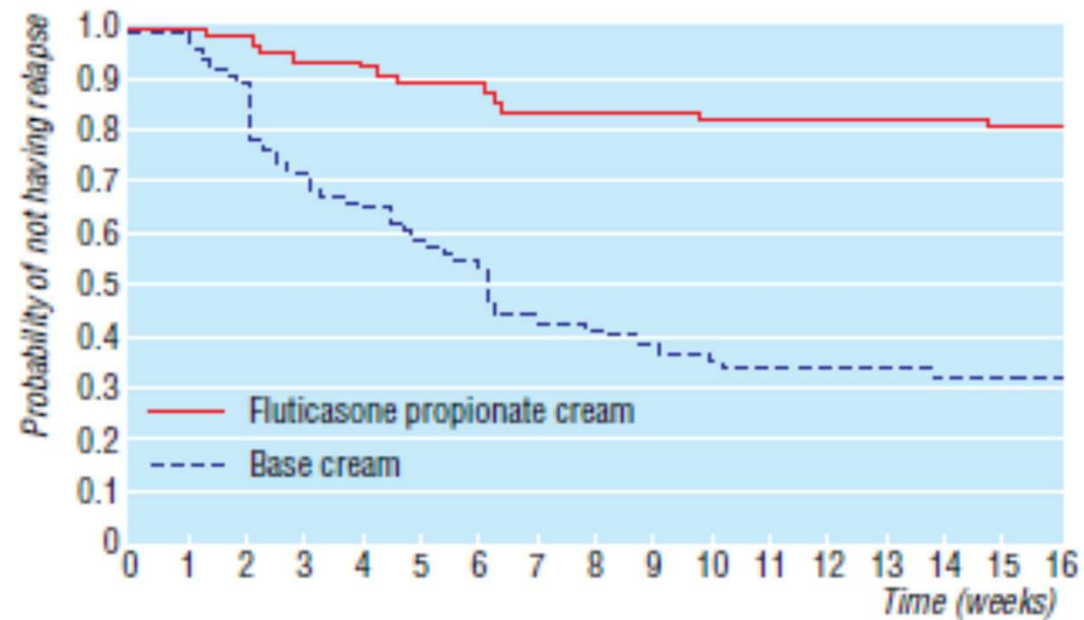


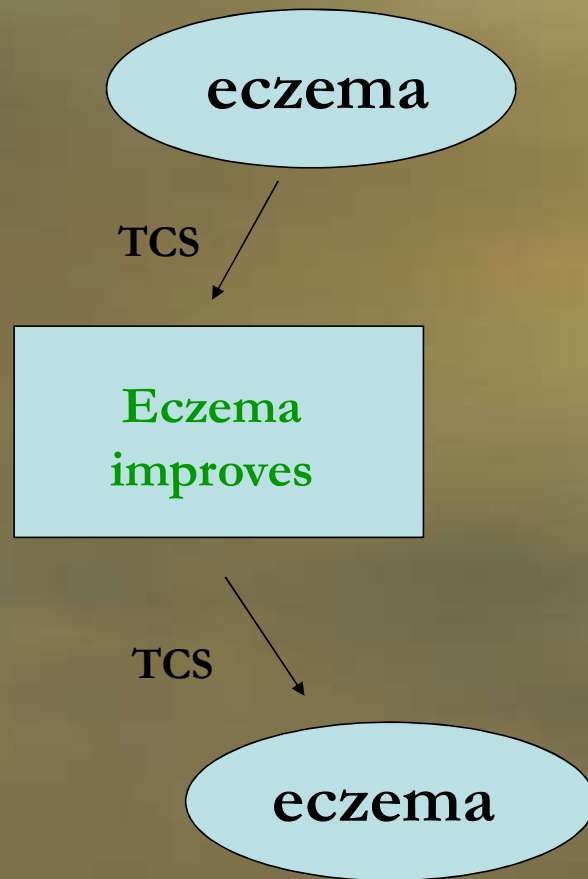
Fig 2 Kaplan-Meier plot showing the probability of remaining free from relapse during the 16 week maintenance phase. In the double blind study, twice weekly fluticasone propionate cream or its base (placebo) was used in addition to maintenance treatment with emollients

Common Steroid concerns

- I applied, it improved; I stopped, it returned; I reapplied, it didn't seem to work as well



Tachyphylaxis

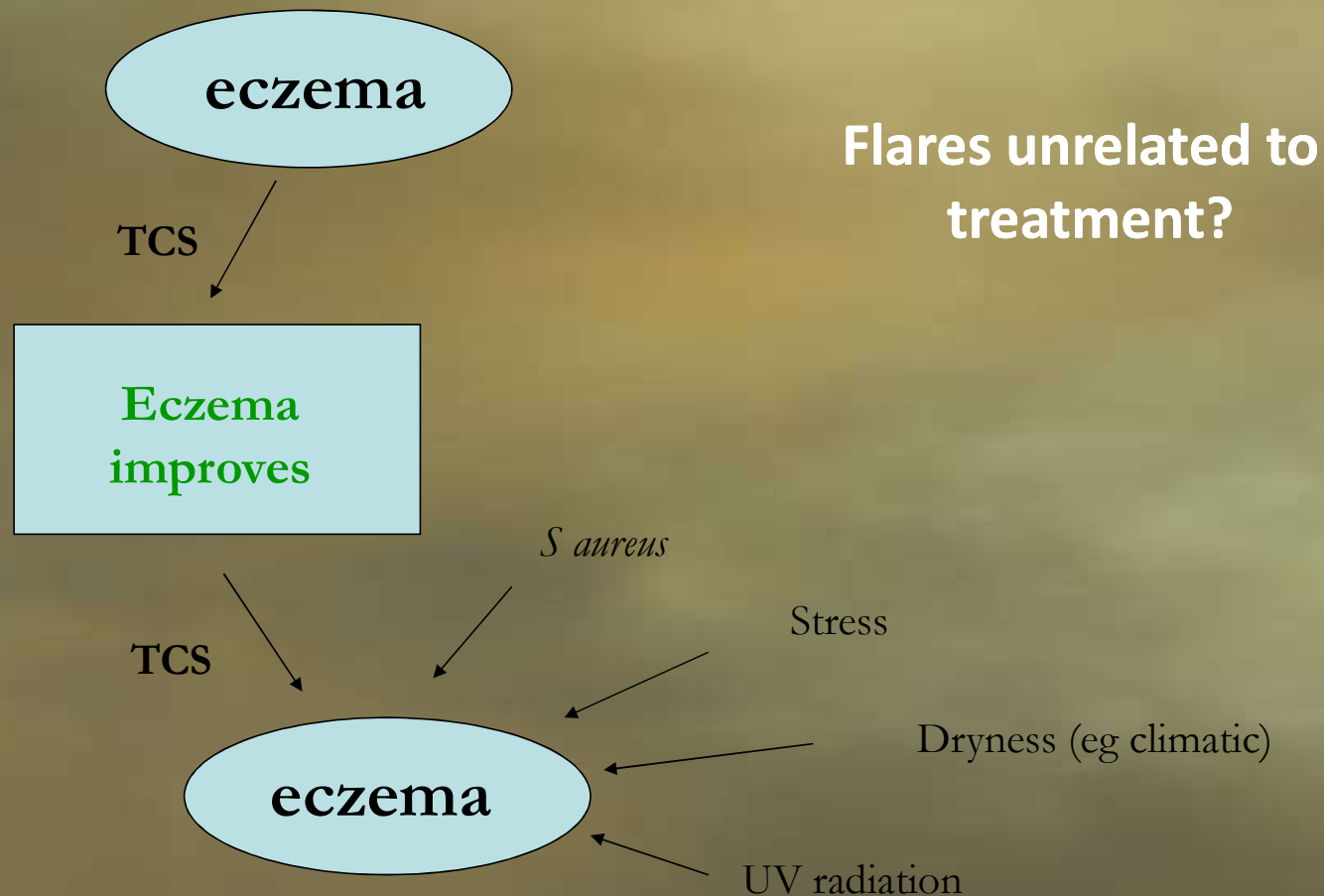


Tachyphylaxis: rapidly-decreasing response to action of a drug after repeated doses

- **Demonstrated on normal skin, but failed to be shown on diseased skin!**

Miller et al J Am Acad Dermatol 1999;41(4):546-9

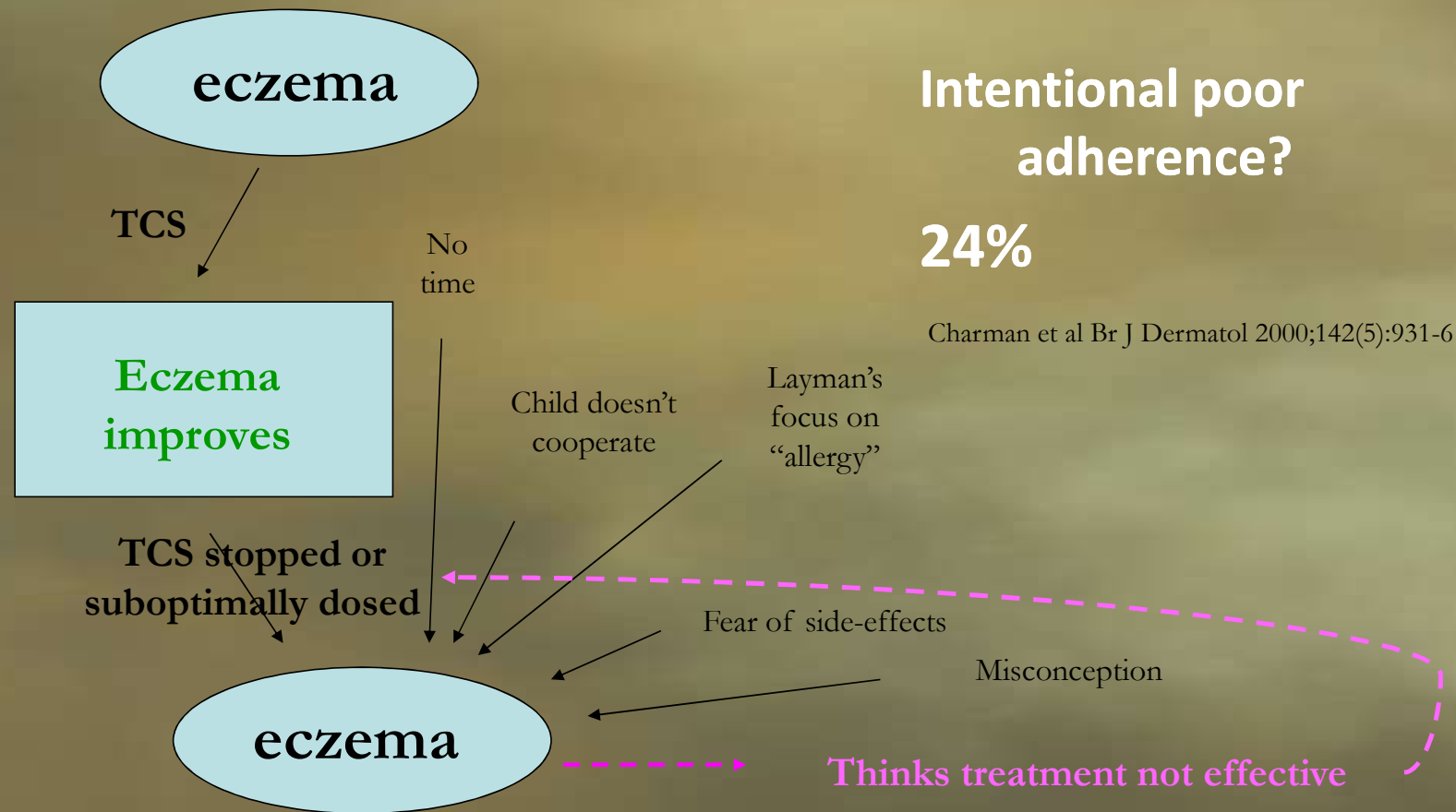
Consider "Pseudotachyphylaxis"



Maybe patient having additional stress unrelated to the cream
OR intentional poor adherence

Before they say cream is useless -> get the history
Ensure its not non-compliance or other factors

Consider "Pseudotachyphylaxis"



Intentional poor adherence?

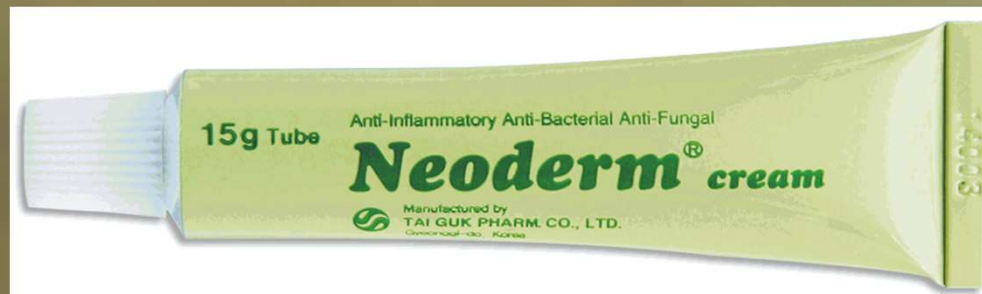
24%

Charman et al Br J Dermatol 2000;142(5):931-6

put elss thinking about the side effects

Common Steroid concerns

- Just give me this!



Neoderm
betamethasone dipropionate 0.64%,
clotrimazole 10mg, gentamicin sulfate

Risk 1: Atrophy

Drugs & Medications - Triderm Top

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Triderm Top

[Back to Drug Overview](#)

What should I know before taking Triderm Top?

If you are:

Pregnant:

Only When Necessary: AMT OF ABSORPTION UNKNOWN; POSSIBLE RISK OF OROFACIAL CLEFTS W/SYS CORTICOSTEROID

Nursing:

Precaution: AMOUNT OF SYSTEMIC ABSORPTION UNKNOWN, CAUTION ADVISED

An adult over 60:

Precaution: RISK OF SKIN ATROPHY, ULCERATION, ESP. W/DECREASED SKIN CIRCULATION

Giving Triderm Top to a child under 12:

Relative Contraindication: LIMIT USE. MAY BE MORE SUSCEPTIBLE TO TOPICAL STEROID-INDUCED HPA-AXIS SUPPR.

Risk 2: Dependency



STeroid cream has changed the appearance

Risk 3: Incognito



Common Steroid concerns

- I don't want to use steroids because everyone says they are bad



The real risk is low if you use it in the RIGHT WAY
dont forget the moisturizers!

Provide **basic** steroid education

- 👍 TCS is not the only weapon against eczema
- 👍 Risk is low with judicious use

Provide steroid assurance

- 👍 Hit-hard-then-relax is better than touch-and-go
- 👍 Maintenance regime can help reduce relapses and minimise steroid use in the long-term

Desonide, mometasone fuorate and fluticasone proprionate less likely to cause skin thinning

Select less atrophogenic steroid



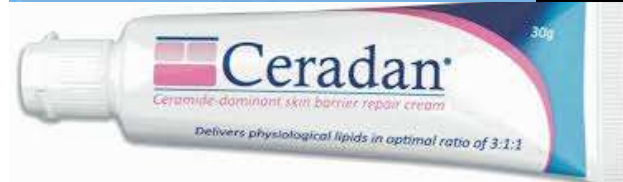
very expensive!

Consider topical calcineurin inhibitor (TCI)



Some have therapeutic ingredients

Use therapeutic moisturizer



Apply AFTER Shower in the morning and at bedtime!

When to apply?



How much to apply?

*In a week for
an adult...*



if you are not using this amount, its not enough.

200-300g weekly for adults

100-200g weekly for
children

Case examples

Clotrimazole gets worse because - it is alcohol solution and will worsen the situation

The son of this 80-year old man brings his father to the pharmacy and asks for a “good moisturizer”.



This lady came last week for hydrocortisone cream.
She is back for another tube.



This housewife comes with a prescription for betamethasone valerate 0.1% ointment BD.



yellow brown crusting -bacteria infection maybe he needs some abx
steroid antimicrobial and PP wash

This man has on and off itch on his feet for many years,
and now has a “flare”. He requests for hydrocortisone
1% cream from you.



Ask the Experts - Sandfly bites inch and ooze pus

29-Jan-2009 (Thu) Mind Your Body, The Straits Times

Q: I am a 17-year-old boy and I have a problem with sandfly bites on my limbs.

I think I was bitten by sandflies sometime in June. The bites itched and I scratched a lot. Then they got worse and over the next one to two months, they became raw, itched even more and oozed yellow pus.

The scabs would fall off after a few showers but the wounds would still ooze pus. I thought the wounds would heal eventually, but when my skin condition did not improve after two months, I went to a polyclinic.

triderm

I was prescribed a cream called Saerogenta-A and the doctor said I was to apply it to the bites every day for two weeks. There was some relief, but after a few weeks the bites began to itch again even though I was still using the cream. Is there a long-term solution to my problem?

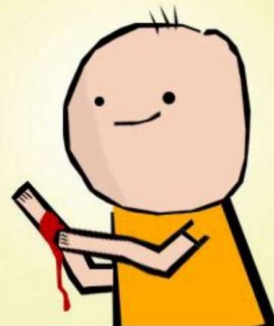
put the cream until rash is gone .never resolve the inflammation problem . put regularly until its gone (hit it hard with the cream until inflammation is gone gone. but do nt stop the cream. MAINTENANCE 2xw for around 2 mths (Eradicate the inflammation under the skin)

ECZEMA ITCH BE LIKE...

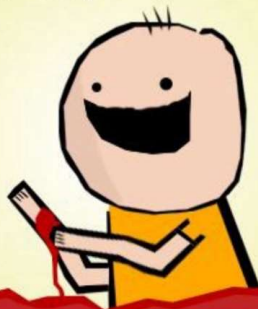
Just a lil' scratchy



Yes, that's better



Almost



Perfect

