



HASSENFELD
**CHILDREN'S
HOSPITAL**
AT NYU LANGONE

Isotretinoin: A dermatologist's take

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DISCLOSURE OF RELATIONSHIPS WITH INDUSTRY

Vikash S. Oza MD

DISCLOSURES

Dove: Consultant – Honoraria

Pfizer: Grant recipient: Consultant-Honoraria

Visual Dx: Consultant-Honoraria

Who is going to care for these children?

10-20% of
adolescents
have severe
acne

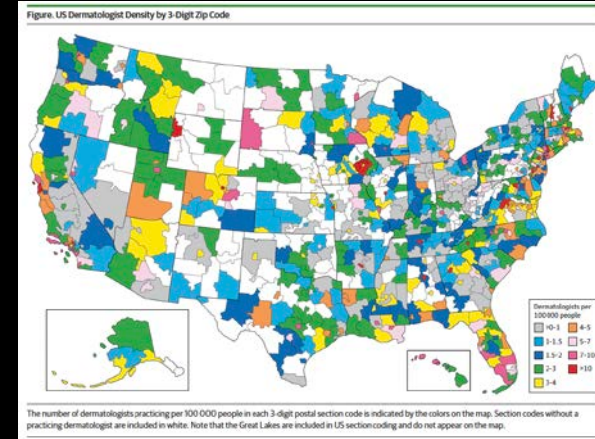
Pediatric Dermatologists

~317 in the US



Dermatologists

*Good luck if your are in
the rural US*



Who do we start on isotretinoin?

Moderate inflammatory acne w/
scarring or failed oral antibiotics



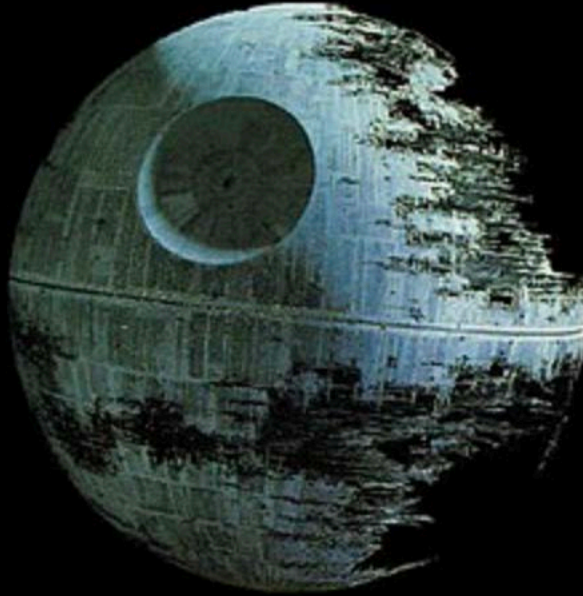
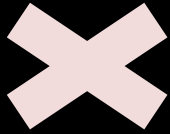
Nodulocystic acne



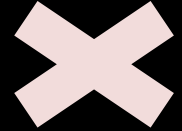
What needs to be in place?

Insurance Company

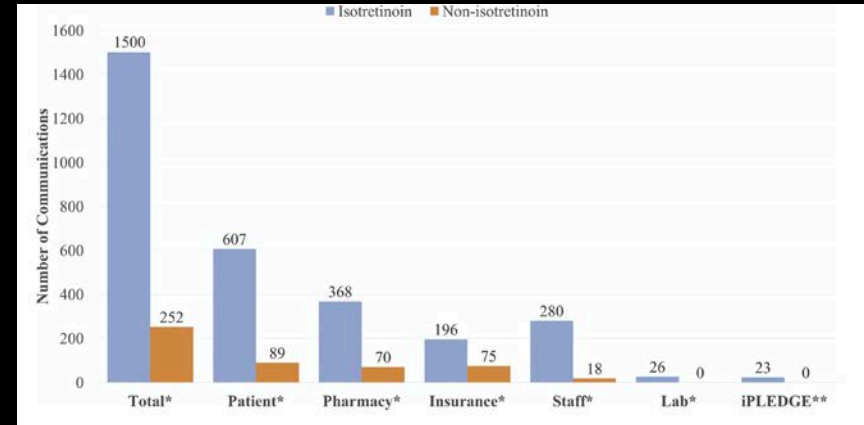
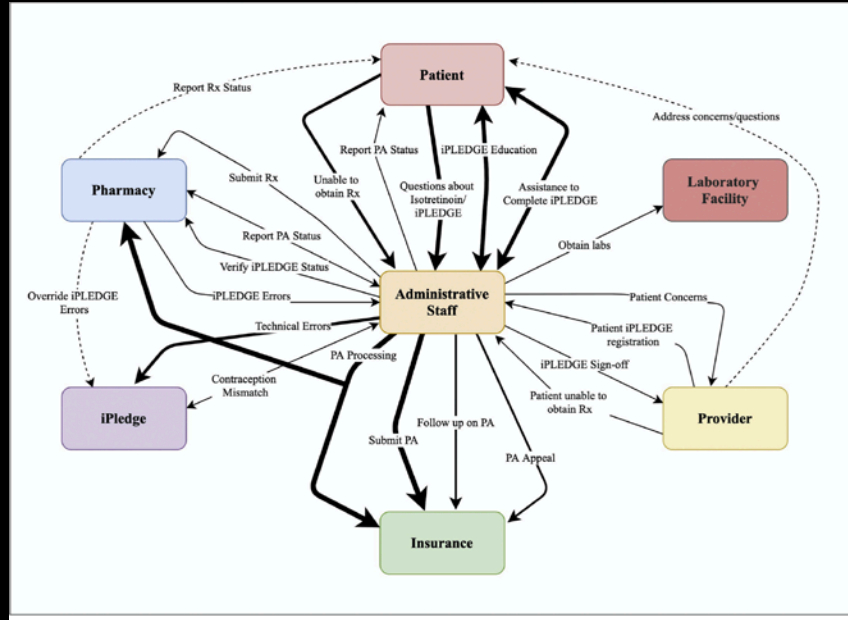
Medical Staff



Female patient



Not as easy as just clicking send

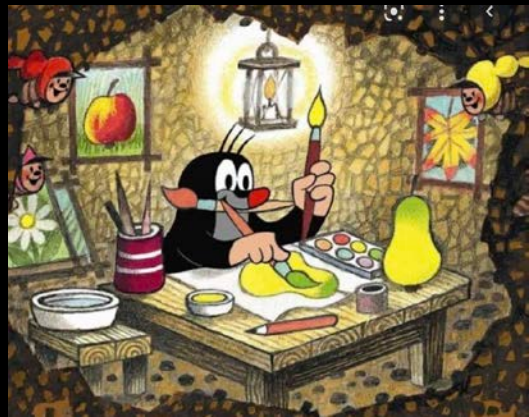


I'm ready to take the leap. What does Lexicomp say?

- Starting dose:
 - “0.5mg/kg/day x 4 weeks then increase to 1mg/kg/day”
- How long to treat:
 - “Typically 15 to 20 weeks depending upon daily dose; a target cumulative dose range of 120 to 150 mg/kg has been recommended ”

Prescribe like a dermatologist: *the art*

- Starting dose: 0.5mg/kg/day
- Dose escalation: 10-20mg each month till a goal dose of 60mg for most adolescents
- How long to treat:
 - Till clear + 1 additional month



Option of low dose isotretinoin



Dosing: 20mg daily x 6 months

The prescription is on its way. How to monitor?

- ☐ Review of symptoms monthly
 - ☐ Dry eyes, lips, eyes, nose bleeds, headaches, muscle pains/aches
- ☐ Depression screening
- ☐ Risk for pregnancy
 - ☐ Monthly urine pregnancy
 - ☐ Compliance with contraception plan
- ☐ Lab monitoring

Isotretinoin lab monitoring

Lexicomp

Monitoring Parameters

CBC with differential and platelet count, baseline sedimentation rate, glucose, CPK; signs of depression, mood alteration, psychosis, aggression, severe skin reactions

Pregnancy test (for all female patients of childbearing potential): Two negative tests with a sensitivity of at least 25 mIU/mL prior to beginning therapy (the second performed at least 19 days after the first test and performed during the first 5 days of the menstrual period immediately preceding the start of therapy); monthly tests to rule out pregnancy prior to refilling prescription



Lipids: Prior to treatment and at weekly or biweekly intervals until response to treatment is established. Test should not be performed <36 hours after consumption of ethanol.

Liver function tests: Prior to treatment and at weekly or biweekly intervals until response to treatment is established.

Monitor like a dermatologist

CONTINUING MEDICAL EDUCATION | VOLUME 80, ISSUE 4, P900, APRIL 01, 2019

JAAD Game Changers: Standardized laboratory monitoring with use of isotretinoin in acne

Eden Lake, MD  

1

Prior to initiation (ideally within a month)

Check ALT and triglycerides

2

Initiation isotretinoin

No additional laboratory tests at this time

3

At peak dose

Recheck ALT and triglycerides

4

End of treatment

No additional laboratory tests required





iPLEDGE™

Committed to Pregnancy Prevention

Depression

Reproductive health/Puberty

Identity

Consent/Privacy

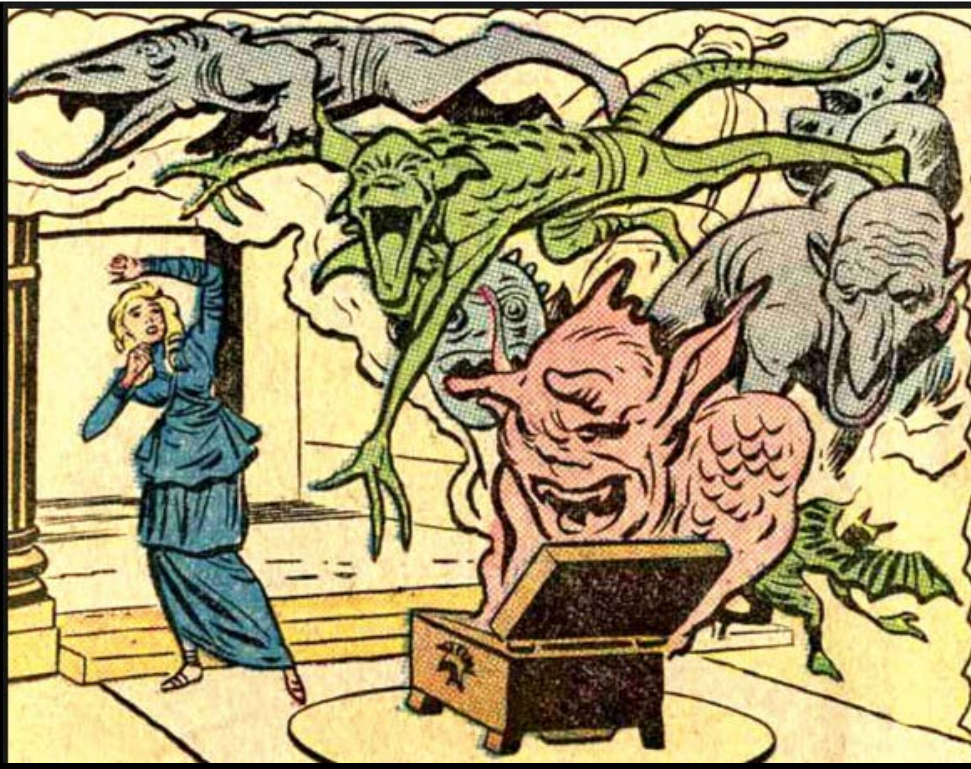
Decision making



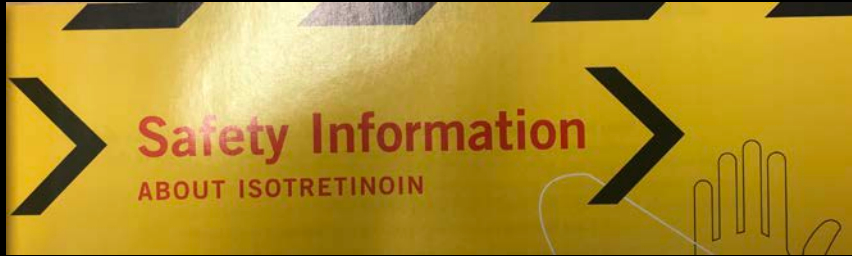


iPLEDGE™

Committed to Pregnancy Prevention



Ipledge Warning



2. Serious mental health problems. Isotretinoin may cause:

- Depression
- Psychosis (seeing or hearing things that are not real)
- Suicide

Some patients taking isotretinoin have had thoughts about hurting themselves or putting an end to their own lives (suicidal thoughts). Some people tried to end their own lives. And some people have ended their own lives.



Depression and What We Treat

Psoriasis

19% with clinical depression



Dowlathshahi EA et al. JID 2014

Hidradenitis Suppurativa

36% with depressive symptoms



Kirby JS et al. JAMA Derm 2017

Alopecia Areata

25% with depressive symptoms



Huang KP et al. JAMA Derm 2013

Acne Vulgaris

19% with major depressive disorder



Vallerand IA et al. Br J Dermatol 2018

Isotretinoin and Psychiatric Illness: A Timeline



Accutane
approved
by FDA



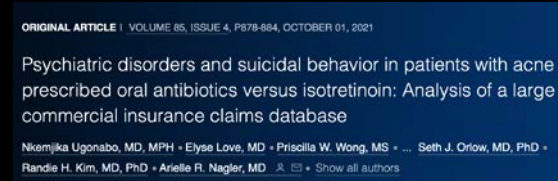
First report
of
depression



Isotretinoin in the
top 10 reported
drugs for
depression/suicide



FDA issues black
box for
depression,
psychosis, suicide



1982

1983

2000

2005

2006

Ipledge starts

2022

Mean difference in depression score change from baseline between the isotretinoin group and the control group



Contraception Counseling in an Adolescent



1/5 in abstinent group were not compliant

Table III. Compliance with contraceptive choices among women who had sex while on isotretinoin (n = 39)

Metric	N (%)
Used 2 approved forms of contraception during last sexual encounter on isotretinoin	31 (79)
Had completely unprotected vaginal intercourse since starting isotretinoin	1 (3)
Had vaginal intercourse using ≤ 1 approved forms of birth control since starting isotretinoin	12 (31)
No. of oral contraceptives missed or taken late in last month*	
0	11 (61)
1	4 (22)
2	1 (6)
3-4	2 (11)
≥ 5	0 (0)

What to expect...?

Typical Course



Month 1

No effect to
slightly
worse



~ 3 month

Typically see
an effect



~ 6 month

Clear

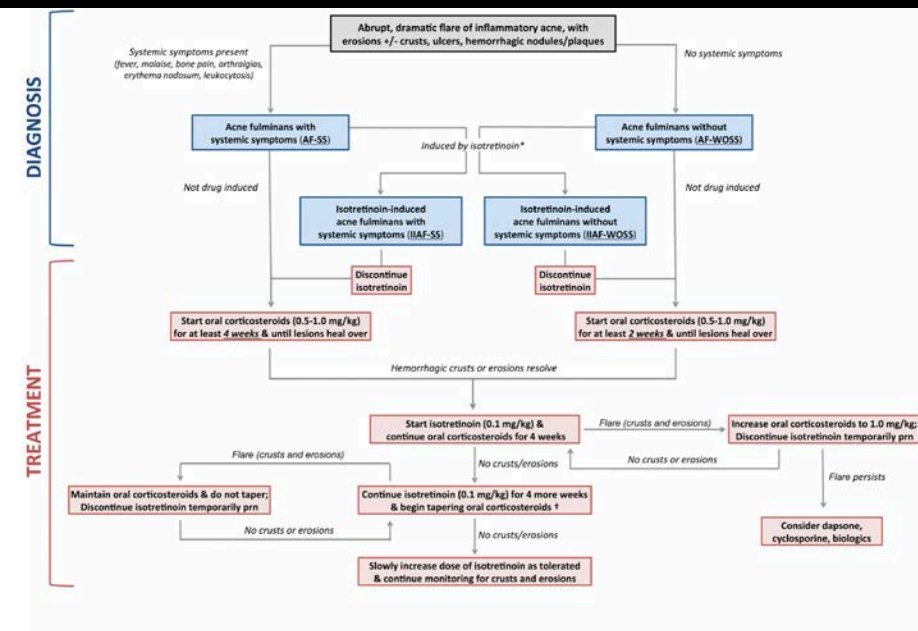
When isotretinoin is the problem

Acne fulminans

- Rapid flare
- Inflammatory nodules
w/ erosions, crusting,
ulcers
- +/- systemic symptoms
 - Fever, myalgias, bone
pain

Original article

Evidence-based recommendations for the management of acne fulminans and its variants



Step 1:

Stop Isotretinoin

+

Start prednisone (0.5-1mg/kg/day)



End point: Healed Erosions



Original article

Evidence-based recommendations for the management of acne fulminans and its variants

End point: Healed Erosions



Step 2: 4 weeks

Isotretinoin 0.1mg/kg

+

Continue same dose prednisone



Step 3: 4 weeks

Isotretinoin 0.1mg/kg

+

Start prednisone taper



Step 4:

Slow isotretinoin increase

Questions?



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