Adherence To Treatment

Steven R. Feldman, MD, PhD
Professor of Dermatology, Pathology & Public Health Sciences
Director, Psoriasis Treatment Center
Wake Forest University
School of Medicine
Winston-Salem, North Carolina
Conflicts/Disclosures

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Objectives

• *To describe ways to manage difficult to treat psoriasis*

• *To describe how well (poorly) patients use dermatological treatment*

• *To list ways to improve patients' use of medications*
Low Hanging Fruit

• We have treatments that are remarkably effective
• Patients don’t always get better
• Consider resistant atopic dermatitis
  – 12 year old patient
  – Total body, lichenified atopic dermatitis
  – Failed outpatient treatment with high strength topical steroids, sauna suit, methotrexate, cyclosporine
Resistant Atopic Dermatitis

• Solution
  – Admit the patient to the hospital
  – Treat with topical triamcinolone
  – They clear up in 3 days
Three Big Reasons for Poor Treatment Outcome

1. Poor Compliance
2. Poor Compliance
3. Poor Compliance

In an anonymous survey of psoriasis patients, 40% report noncompliance!!!

Psoriasis Resistant to Topical Treatment

- 35 year old male
- Psoriasis of the elbows and knees
- Prescribed combination of betamethasone and calcipotriol
- Returns in 2 weeks with no improvement
- Is the patient genetically deficient in steroid and vitamin D receptors?
Primary Nonadherence

- Many patients don’t even fill the prescription
- Psoriasis patients are among the worst

Topicals Stopped Working

• 45 year old woman with psoriasis of the legs
• Initial good response to topical betamethasone
• Over time, the medication has gradually become less effective and no longer controls the psoriasis
• Why is the disease now resistant?
  – Has she developed mutant T cell steroid receptors?
  – Were the T cells in the lymph nodes exposed to the steroid?
Secondary Nonadherence
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Additional notes:
- 4 PM: Admil 1
- 6 PM: Tene 2
- 5 PM: 1 Admil Nom: susinblc def 30

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Electronic/Self-Reported Adherence

Mean Average Daily Adherence

\[ y = -0.0009x + 0.9293 \]
\[ R^2 = 0.0561 \]

\[ y = -0.0056x + 0.7439 \]
\[ R^2 = 0.6457 \]

Slope =~20%/5 weeks

Tachyphylaxis

Biologic Failure

- 52 year old woman had extensive psoriasis
  - 20% body surface area affected
- Treated with adalimumab
  - Initial very good response
  - Gradual loss of efficacy
TNF-Inhibitor Treatment Retention

Dupan SM, Arthritis & Rheumatism (Arthritis Care & Research) 2009; 61: 560–568
Adherence to Biologics

Atopic Dermatitis Adherence is Worse

$y = -0.0013x + 0.3783$

$R^2 = 0.0294$

Mean Average Daily Adherence

Adherence Rates

Days

### Why Are Patients Non-Adherent

<table>
<thead>
<tr>
<th>Reason</th>
<th>Description</th>
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<tr>
<td>Poor motivation</td>
<td>The patient may not be particularly bothered.</td>
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<tr>
<td>Secondary gain</td>
<td>Seeking disability or other gain</td>
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<tr>
<td>Lack of trust in doctor</td>
<td>Physician-patient relationship is the foundation</td>
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<tr>
<td>Fear of medication</td>
<td>Founded or unfounded fear of treatment.</td>
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<tr>
<td>Don’t know what to do</td>
<td>Patients may not remember oral instructions</td>
</tr>
<tr>
<td>Burden of treatment</td>
<td>Sometimes the tx is worse than the disease!</td>
</tr>
<tr>
<td>Perceived burden</td>
<td>Sometimes tx seems worse than the disease.</td>
</tr>
<tr>
<td>Passing the responsibility buck</td>
<td>With multiple caregivers, no one may take responsibility</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>“Pavlov’s dog” problem</td>
</tr>
<tr>
<td>Laziness</td>
<td>No energy to follow treatment.</td>
</tr>
<tr>
<td>Resignation</td>
<td>Some patients have just given up</td>
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We Can Encourage Better Compliance

- Establish a relationship with patients
- Involve patients in treatment planning
  - Make it easy!
- Don’t scare patients with side effects
- Choose fast acting agents
- See patients back for a return visit
- Give clear, written instructions
Getting Feedback From Patients

You have selected Dr. Andrea 0 Example. Our full survey takes 2 to 3 minutes. You can stop at any point.

SCORE THIS DOCTOR:

On a scale of ‘0’ to ‘10’, where 0 is the worst possible care and 10 is the best possible care, how would you rate Dr. Example?

Add any additional comments about Dr. Example here. Please identify any particularly good things you noted about the visit, as one of the best ways to encourage people is to give them positive feedback on what they do well. (40 word maximum).

Continue

Ratings and comments submitted to DrScore are designed to give feedback to physicians to help them enhance their medical practice. DrScore is not a regulatory body and is not an appropriate venue for issues that need the attention of state or professional authorities.
Good Medical Practice

- Make the right diagnosis
- Prescribe the right treatment
- Get patients to use the treatment
  - Communicate & follow up
  - Project the appearance of empathy
    - *Appear* caring
Patients Want Caring Doctors

Fig. 1. Relationship between patients’ perception of their doctor’s friendliness and caring attitude and patients’ overall satisfaction.

Interventions to Appear Caring

• Sit down

• Examine patients carefully
  – Palpate the rash
  – Waive a lighted magnifier over lesions

• Asking a few questions about the disease
  – “Your previous treatments have probably been very frustrating…”

• Address psychosocial issues
  – Use support groups
Put a clock on the wall behind the patient

- Looking at a watch can be the kiss of death
  - Put clocks behind where patients sit
- I’m doing it now because I care, not because I am in a hurry
- What matters is how it is perceived
Choose a vehicle that the patient will use

- Less messy products seem to be preferred over:
  - Ointment
  - Cream
  - Emollient
  - Gel

---

Scalp, Palm, Face and Body Psoriasis

• 38 year old male presents with scattered lesions of psoriasis
• Treated with:
  – Scalp: fluocinonide and calcipotriol solutions
  – Face: desonide ointment and topical tacrolimus
  – Palms: Clobetasol ointment and tazarotene gel
  – Body: betamethasone/calcipotriene ointment
• Returns in 8 weeks with minimal improvement
Simplify Treatment

Median Adherence Over Time

Percent Adherence

Week of Study
Resistant Atopic Dermatitis

- 12 year old patient
- Total body, lichenified atopic dermatitis
- Failed outpatient treatment with high strength topical steroids, sauna suit, methotrexate, cyclosporine
- This time, you don’t want to admit him to the hospital
Add a One Week Return Visit

- Kids with atopic dermatitis
- 0.1% tacrolimus ointment BID
- Return in 4 weeks or 1 week/4 weeks

Betamethasone/Calcipotriene Consistent Results

Why did one study, in green, have worse result at 2 weeks?
Table II. Patient knowledge about basic drug information, satisfaction with the consultation, and worries about adverse effects 2 weeks after a consultation according to a questionnaire, n=17.

<table>
<thead>
<tr>
<th>Patient knowledge and opinion</th>
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<td>Diagnosis</td>
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<tr>
<td>Duration of treatment</td>
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<td>Daily applications by number</td>
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<td>8</td>
<td>47</td>
</tr>
<tr>
<td>Worried about adverse effects</td>
<td>8</td>
<td>47</td>
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Curse of Knowledge

- Better informed people find it difficult to think from the perspective of less well-informed people
- Makes it hard to meet patients’ education needs
Table II. Patient knowledge about basic drug information, satisfaction with the consultation, and worries about adverse effects 2 weeks after a consultation according to a questionnaire, $n=17$.

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Your Child’s Eczema Action Plan

What is eczema?
Eczema, also called atopic dermatitis, is a chronic disease of the skin—meaning it is an ongoing problem. It causes dry, itchy, irritated skin and can be stressful for kids and families. It is not contagious. It sometimes runs in families, but not everyone in the family will have eczema.

Even though there is no cure, there are lots of good ways to control eczema. The BEST thing you can do for eczema is to keep skin moisturized! Kids with eczema have dry skin, and the drier the skin, the more itchy and irritated the skin will be.

Here are some tips:
- Bathe daily. Use lukewarm water, 10 minutes or less.
- Use a small amount of mild soap. Choose one that is fragrance free. A liquid or bar is fine. Some that are specially made to be milder include: Dove, Cetaphil, Purpose, Cerave
- Pat skin dry—don't rub. Be gentle; rough rubbing can irritate skin.
- Moisturize. This is best done right after bathing, when the skin is still a little wet. Moisturize as needed throughout the rest of the day.
- Choose a moisturizer without fragrance. Here are some examples: Eucerin cream, Cetaphil cream, Cerave cream, Aquaphor ointment, Vaseline petroleum jelly ointment
- Choose fragrance-free soaps, moisturizers, & laundry detergent. Don’t use dryer sheets; they are too irritating.

What to do in a flare:
Despite good routine care, your child's eczema may still flare. The plan below will tell you what medicines to use to get the flare under control.

Don’t forget—keep using good routine skin care even during a flare!

What to use during a flare:

1. NORMAL/DRY:
Normal skin, a little dry, not itching much if at all.
PLAN:
• Regular skin care routine; moisturize twice daily

2. MILD: Itchy skin with slight redness.
PLAN:
• Regular skin care routine, but moisturize a little extra
• HYDROCORTISONE Cream: use once a day until the itching is gone (Use HYDROCORTISONE 2.5% Cream to the face and genitals.)

3. MODERATE: Bad itching that keeps you and/or your child awake at night or causes scratching that leaves marks.
PLAN:
• Regular skin care routine, but moisturize a little extra
• TRIAMCINOLONE 0.1% OINTMENT: use twice a day until the itching is gone (Use HYDROCORTISONE 2.5% Cream to the face and genitals.)

4. SEVERE: Skin that is PAINFUL, RED, CRUSTED, or has PUS. Your child may have a FEVER or CHILLS.
PLAN:
• CALL YOUR DOCTOR TO SCHEDULE AN APPOINTMENT!
Your child may have an infection requiring antibiotics.

CALL US at __________ on: M-T-W-T-H-F
Let us know how your child is doing overall.
Next appointment:
Motivating Kids

- Positive reinforcement
- Sticker calendar
Side Effects are a Mixed Bag

- Side effects & fear of them can reduce compliance
- Side effects may also be an opportunity
- For acne patients on spironolactone
  - “This drug is a diuretic. In addition to its effect on your acne, you may also notice some weight loss.”
- For scalp psoriasis, tell patients: This may sting…
  - That’s because it is so strong.
  - The stinging is a sign that it is working
  - Most guys don’t have what it takes to use this stuff
Framing

• A set point, even an arbitrary one, affects perceptions
• A risk that is more likely than being killed by lightning doesn’t sound nearly as bad as a risk that is less likely than a coin flip
Rates of Serious Infections per 100 Patient-years

N = number of serious infections per treatment group

98 (or more) out of 100 don’t get infected
Anchoring

- How willing would you be to take a shot once a month?
- How willing would you be to take a shot once a day? Once a month?

Unpublished data
Loss Aversion

- Losses make bigger impact than equivalent gains
- Taking a statin
  - If you take this statin regularly, on average, you would live a year longer
  - If you don’t take your statin regularly, on average, you would die a year sooner
- Sunscreen
  - Will keep you looking young
  - If you don’t use it, you will lose the youthful look of your skin

Ariely D. *Predictably Irrational*
Address Cost Issues

• Prescribe low cost medicines
• Give patients a range of options
  – Lower cost generics
  – Higher cost drugs that have greater benefit
• Patient assistance programs
  – Company-sponsored copay or other assistance programs
  – Local indigent pharmacy resources
• Change the priority/urgency
  – Real and perceived cost/benefit
• Encourage patient to share cell phone with the pharmacist
• Powerful force
  – Opt out vs opt in
    • Dramatically increases retirement plan participation
  – Keeps people from switching medications

• Also, too much choice isn’t helpful
  – People choose the middle
Assessing Adherence

• The Honest Truth About Dishonesty
  – “Try to recall the Ten Commandments”

• Also, ask indirect questions
  – “Are you keeping the extra syringes you’ve accumulated refrigerated like you are supposed to?”
  – “What do you do with leftover medication? Is it in a locked cabinet or in the medicine cabinet or do you throw it away?”
Adherence to Biologics

• Adherence to biologics is limited
  – Ask, “Are you keeping the extra syringes you’ve accumulated refrigerated like you are supposed to?”
  – Some practices have better adherence rates than others

• Provide structure
  – Have patients pick the one or two days of the week that they take the medicine and stick to it

• Anchoring
  – ”You only need to take the injection once a day. Wait, did I say once a day? It’s only every month.”
Resistant Scalp Psoriasis

- 36 year old woman with resistant but limited scalp psoriasis
- Has seen many dermatologists
- Has tried numerous topicals with no benefit
  - She brings a bag full of them, including clobetasol solution
- Is wondering about using a biologic
Scalp Psoriasis is Tough to Treat

• …The first phase is active descaling. In case of mild scaling, regular shampooing is an option. Application of salicylic acid 5% to 10% of urea up to 40% in a wash-off ointment may enhance descaling. An automatic shampooing machine may help at day-care centers for efficient descaling.
• The second phase is active clearing treatment. The first-line approach is a vitamin D₃ lotion or emulsion once a day and a superpotent topical corticosteroid in a vehicle that is well accepted by the patient once a day. If this approach is not effective after eight weeks or not appreciate for reason of intolerance, a superpotent topical corticosteroid may be combined with UVB therapy. In order to optimize phototherapy of the scalp, a hair blower or a UVB fiber comb can be used. Another alternative for the second phase is dithranol and tar-based treatment at a day-care center. If all these approaches are not effective, cultures for Malassezia should be taken and a systemic antifungal treatment can be started. In case all these treatments are not effective, a systemic antipsoriatic treatment should be considered with methotrexate, fumarates, cyclosporine or acitretin.
• The third phase of treatment is stabilization with a vitamin D₃ analog on weekdays (once or twice daily) and a superpotent topical corticosteroid once daily during the weekend. In case a vitamin D₃ analog is not tolerated, one may restrict to intermittent applications of the corticosteroid only.
• The fourth phase is the maintenance phase. For this phase, a vitamin D₃ alone is the preferred treatment either once or twice daily. A tar shampoo may further support this phase.

Scalp Psoriasis is Resistant to Treatment?

- Forehead
- Jaw
- Forearm
- Axilla
- Scalp
- Back
- Palm
- Ankle
- Plantar foot
- Forearm

Poor penetration
Example: Piano Lessons

- “Here is your sheet music; recital in 8-12 weeks”
  - Piano lessons once a week – great recital
  - No weekly lessons – not such a good recital
Cell Phone Number

• Return visits make people get the medicine and use it
  – Focus on initial adherence also promotes habit
  – A cell phone call can do the same thing
• Giving patients your cell phone number is a powerful statement of how much you care about the patient
  – (whether you answer the phone or not)
• Do Not Preprint Your Cell Phone Number on Your Business Card!
Patient Wants Natural Treatment

- 8 year old with atopic dermatitis
  - Mom would like the child treated with all natural treatment

- 25 year old woman with very severe psoriasis
  - She says she wants all natural treatment
Prescribe only “all natural” treatments

• The words we use with patients are important
  – Never label patients “non-compliant”
• Never, ever use the word “steroid” with a mom
• Use reassuring words
  – “All natural”
  – “Complements natural healing pathways”
  – “Holistic”
• “The sun makes vitamin D in your skin naturally”
Internet Survey & Contest

- Half the subjects received a weekly email link to the survey
- For each completed survey, subjects were entered to win an iPod Nano
- For 5 of 6 completed surveys, subjects received a $5 gift card

An Online Survey Improves Adherence

The Impact of Weekly Internet Surveys on Adherence Over Time

Mean Percent Adherence

Week

Conclusions

- Difficulty clearing psoriasis is often due to poor adherence
  - Improving adherence is low hanging fruit
  - Adherence is a major issue in the treatment of chronic skin diseases
- We can promote better adherence
  - Timing of follow up
  - Easy to use treatments
- We need to look to new ways to enhance patients’ adherence and treatment outcomes