

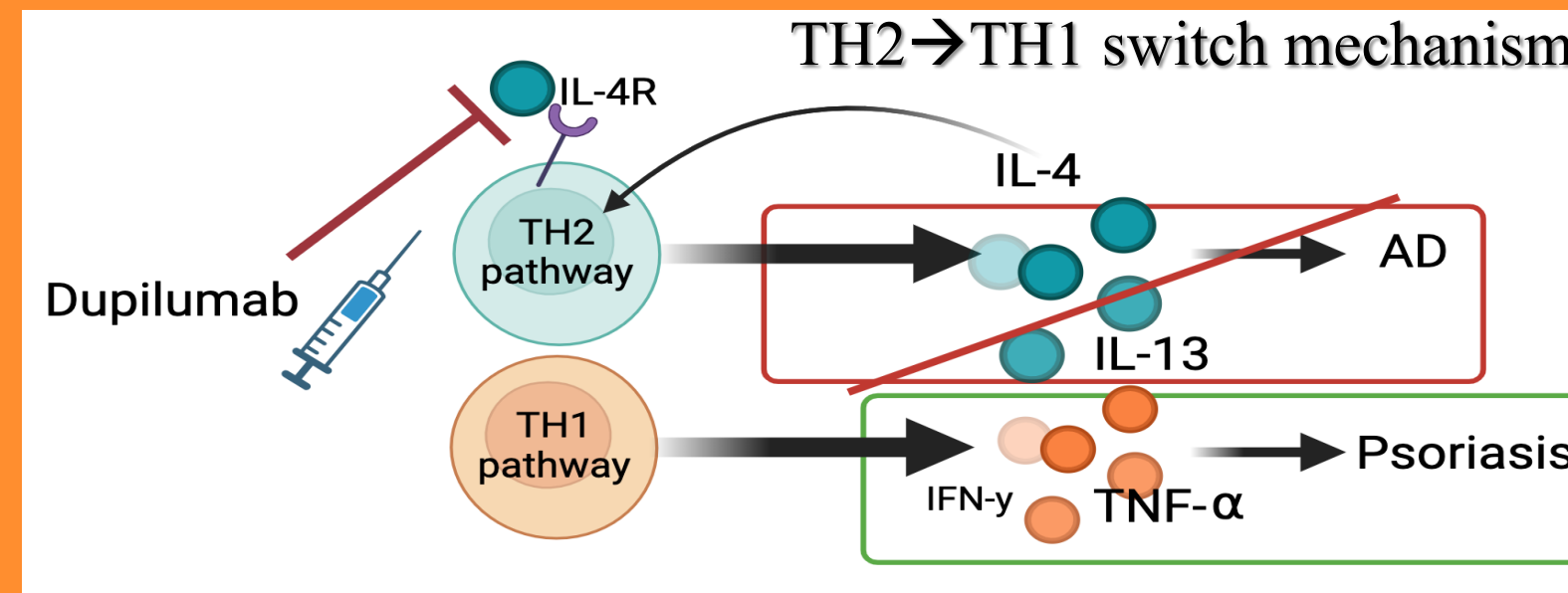
When will the TH1 switch make you switch? A case report of a dupilumab-induced psoriasiform rash over 6 years

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Background

Dupilumab-associated psoriasis may occur in 1.8-3.3% of patients with atopic dermatitis (AD), invalidating the myth that opposing inflammatory processes prevent AD and psoriasis from coexisting. The blockade of interleukins 4 and 13 by dupilumab may promote a switch from T-helper 2 (Th2)-mediated inflammation toward the Th1-mediated inflammation involved in psoriasis. The average latency period from dupilumab initiation to psoriasis development is 5 months.



Conclusion

- A personalized therapeutic approach is important when using dupilumab to treat AD or other chronic/dermatologic conditions.
- Dupilumab-induced psoriasis may develop after several years and should always be considered a potential risk in patients who initially tolerate treatment well.
- The benefit of dupilumab in ameliorating symptoms may outweigh the burden of this adverse effect.
- These considerations should be discussed when starting a patient on dupilumab and throughout the treatment course.

The Clinical Case:

Here we present a unique case of new-onset psoriasis in a patient with AD and prurigo nodularis (PN) nearly 2 years after beginning dupilumab. Psoriasis flares were tolerated for an additional 4 years without drug interruption.

History of the Present Illness

- A 60-year-old woman with no history of psoriasis
- Presented with an extremely itchy, (10/10), full-body rash for one year

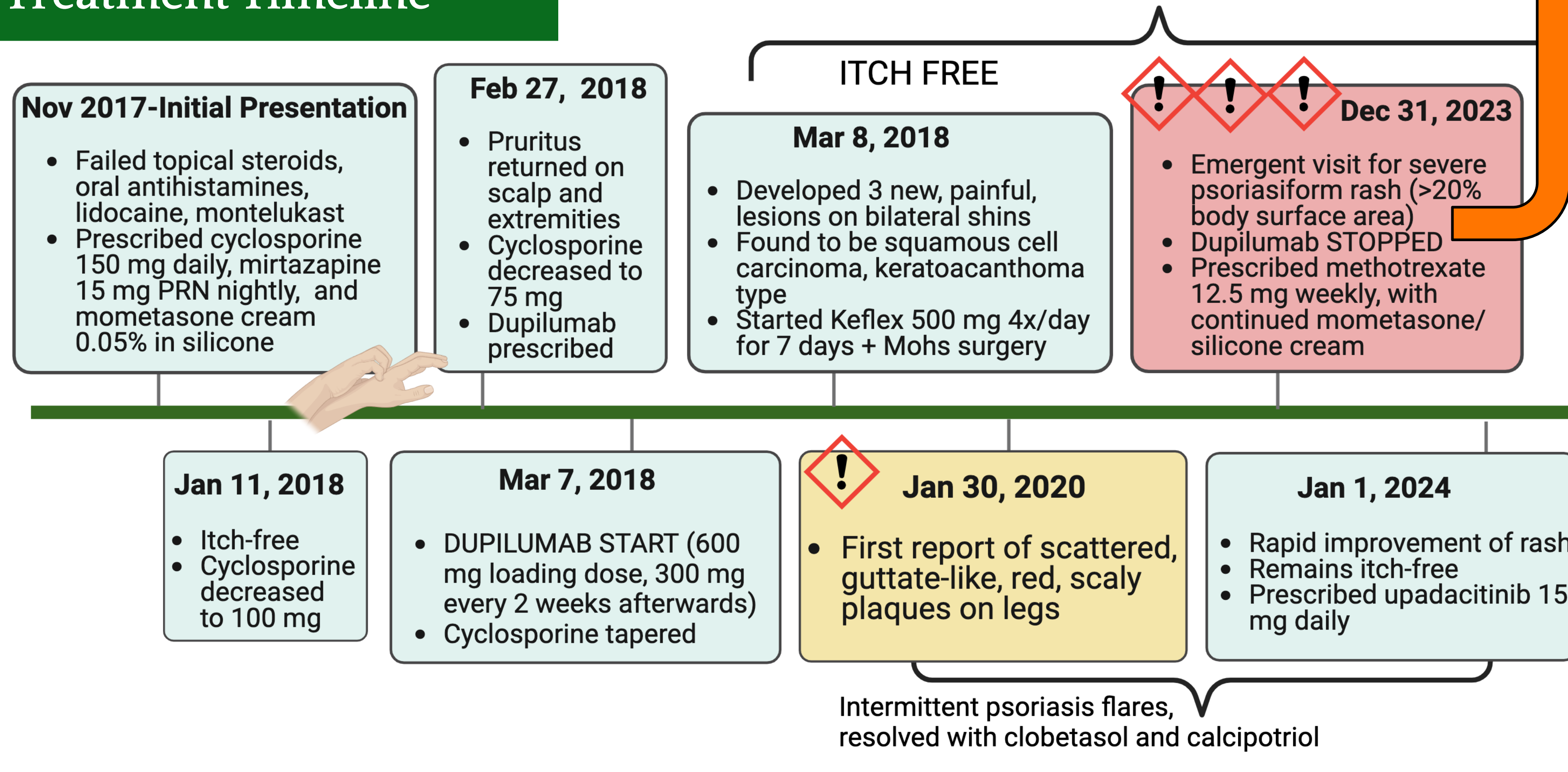
Physical Exam

- Multiple pink, lichenified, scaly papules with excoriations and overlying hemorrhagic crust
- Diffusely located on upper and lower extremities and back

Suspected Diagnoses

- Atopic Dermatitis (AD)
- Prurigo Nodularis (PN)

Treatment Timeline



Future Directions

- The development of psoriasis while on dupilumab is not uncommon, however, there is limited data on how long patients can tolerate symptoms
- Additional research is needed to further characterize this relationship

References

Su Z, Zeng YP. Dupilumab-Associated Psoriasis and Psoriasiform Manifestations: A Scoping Review. *Dermatology*. 2023;239(4):646-657. doi:10.1159/000530608

Trave I, Salvi I, Burlando M, Cozzani E, Parodi A. "De Novo" Psoriasis and Relapse of Psoriasis Induced by Dupilumab: Three New Cases and Review of the Literature. *J Clin Med*. 2023;12(19):6291. Published 2023 Sep 29. doi:10.3390/jcm12196291