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Psoriasis or Psoriasiform Eruptions in the Pediatric Population Undergoing anti-TNF- α therapy: A Multi-center, Retrospective Case Series

Joshua Eickstaedt, M.D.; Amy Paller, M.D.; Heather Brandling-Bennett, M.D.; Kristi Holland, M.D.; Kelly Cordoro, M.D.; Esteban Fernandez-Faith, M.D.; Marilyn Liang, M.D.; Elaine Siegfried, M.D.; Megha Tollefson, M.D.

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Disclosures

- None

Background

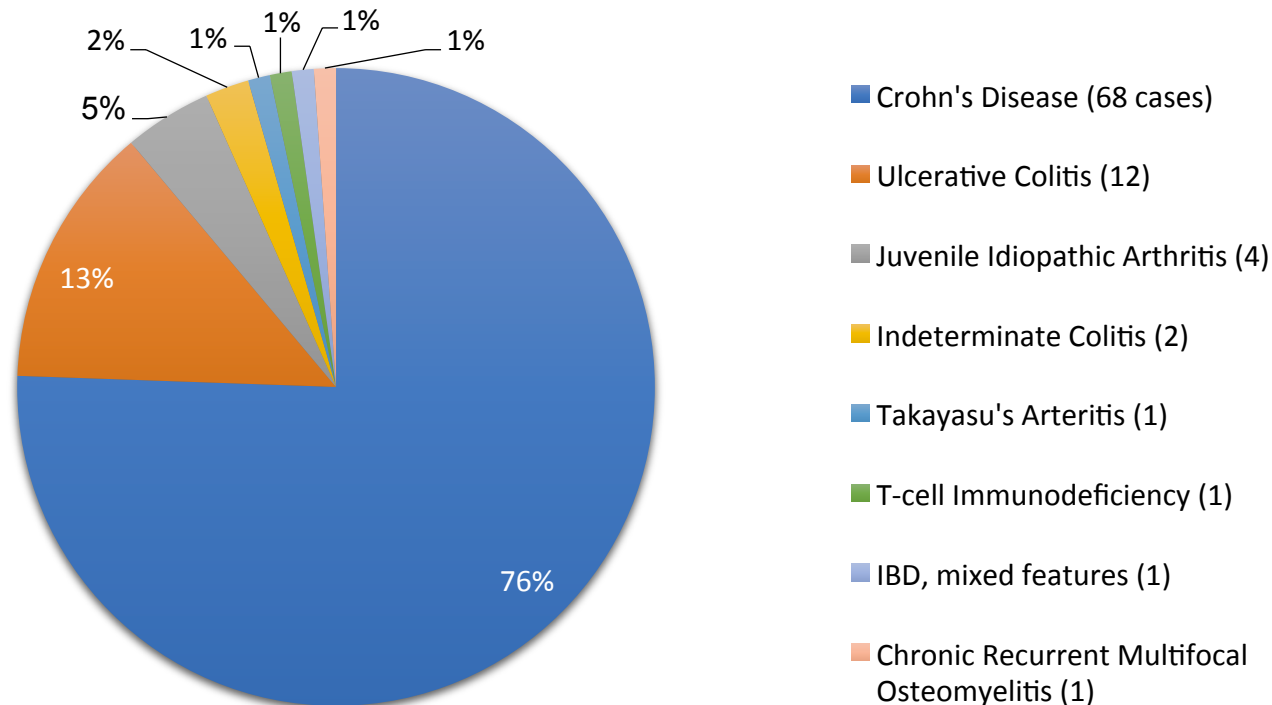
- TNF- α antagonists developed to treat several diseases
 - Including Psoriasis and IBD
- Adult GI literature illustrated paradoxical reaction of TNF- α antagonist-induced PSO [1]
- Recent studies in children with IBD demonstrated similar findings [2, 3]

Study Objectives

- Describe and quantify the magnitude of TNF- α antagonist-induced PSO eruptions
- Characterize natural history and response to treatment of the eruptions

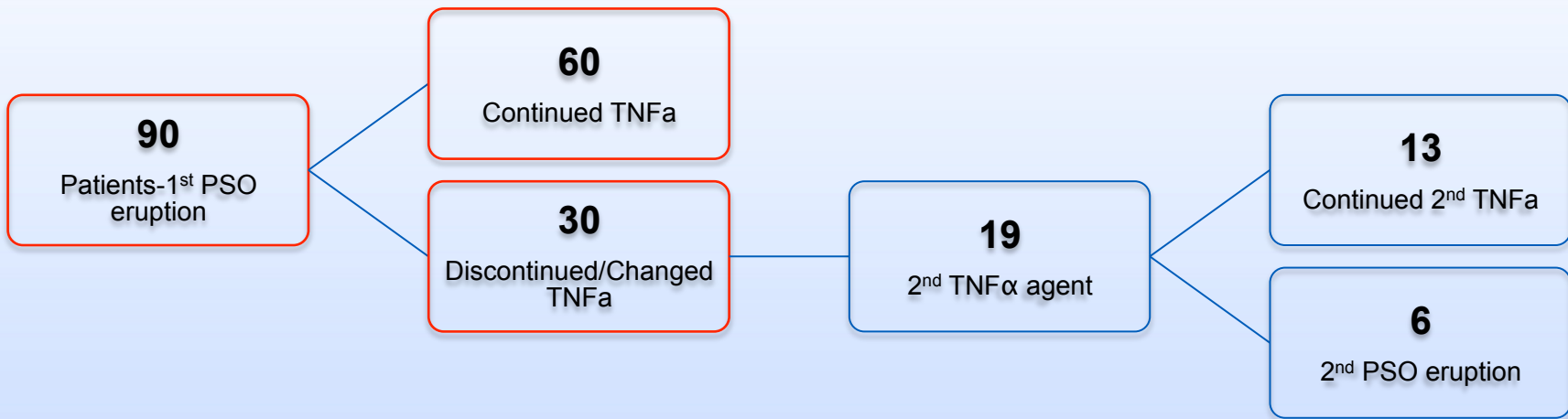
General Characteristics

- 7 total sites → 90 total cases
- Initial anti-TNF- α agent
 - Infliximab → 59 cases (66%)
 - Adalimumab → 31 cases (34%)
- Crohn's Disease most common 1^o disease indication



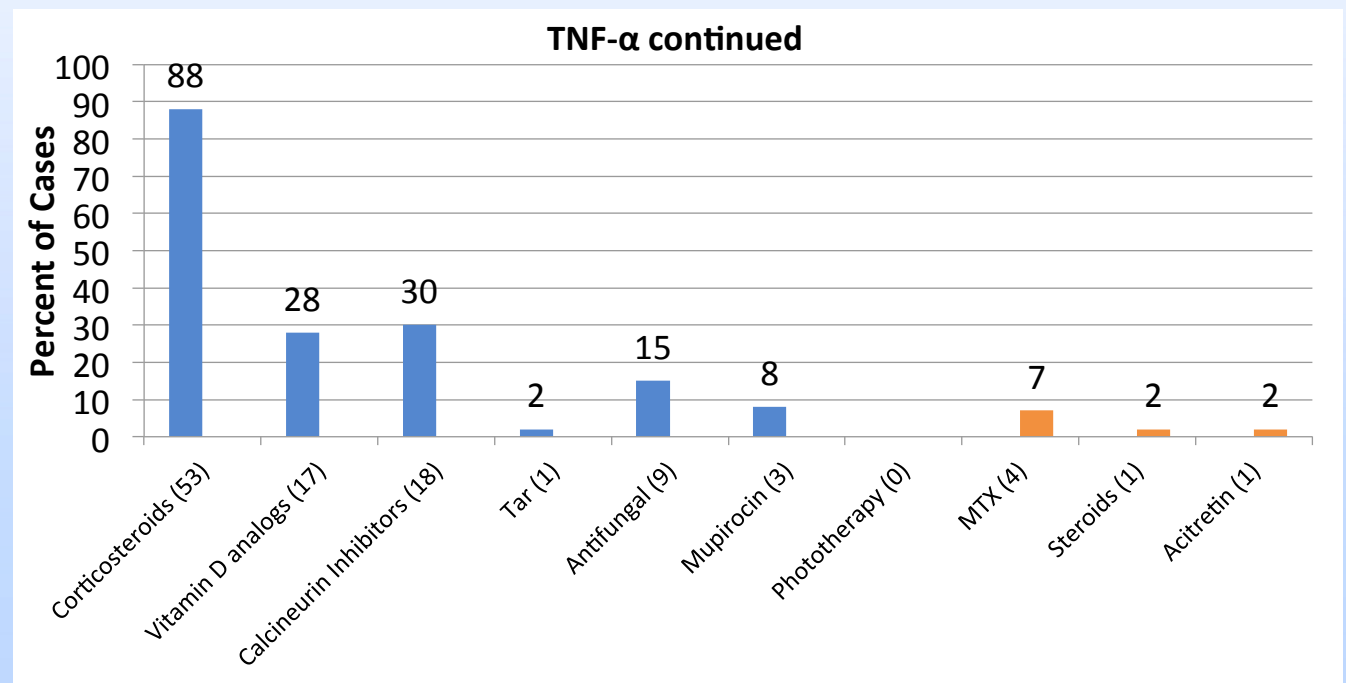
PSO eruption

- Mean age upon PSO eruption → 13.7 years
- Males (51%) = Females (49%)
- Plaque PSO most common subtype (50%)
- Most common anatomic location effected
 - Scalp (54%)
 - Lower extremities (45%)



TNF- α Antagonist Continued

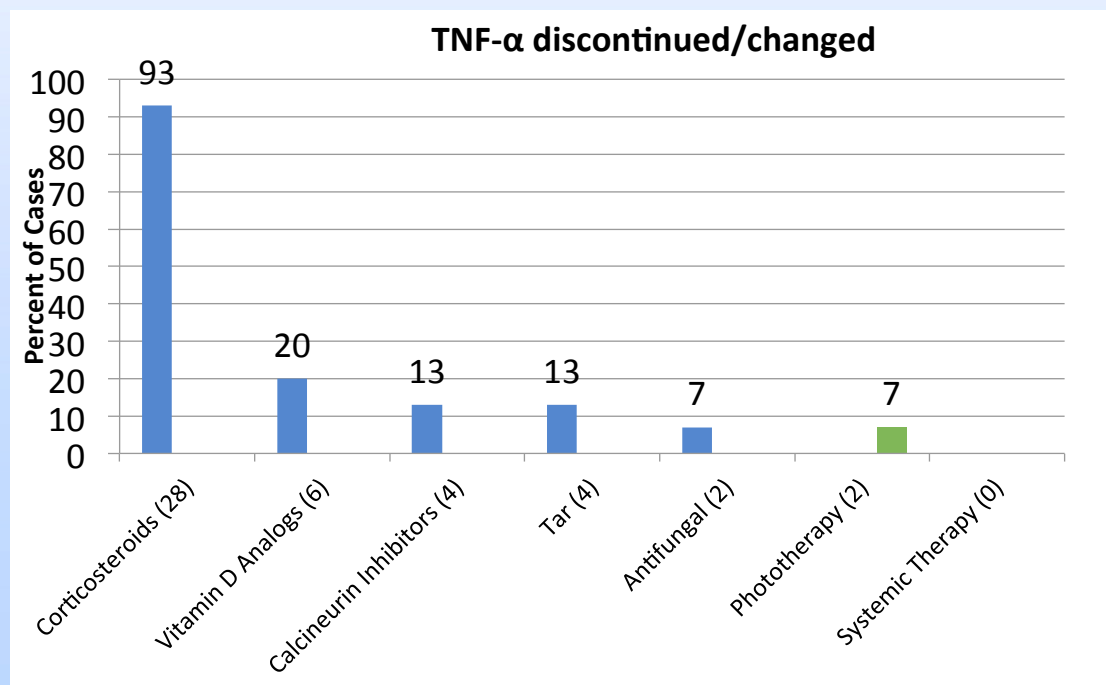
- 67% continued 1st-line anti-TNF- α agent
 - 88% complete/partial remission
 - 3% no improvement

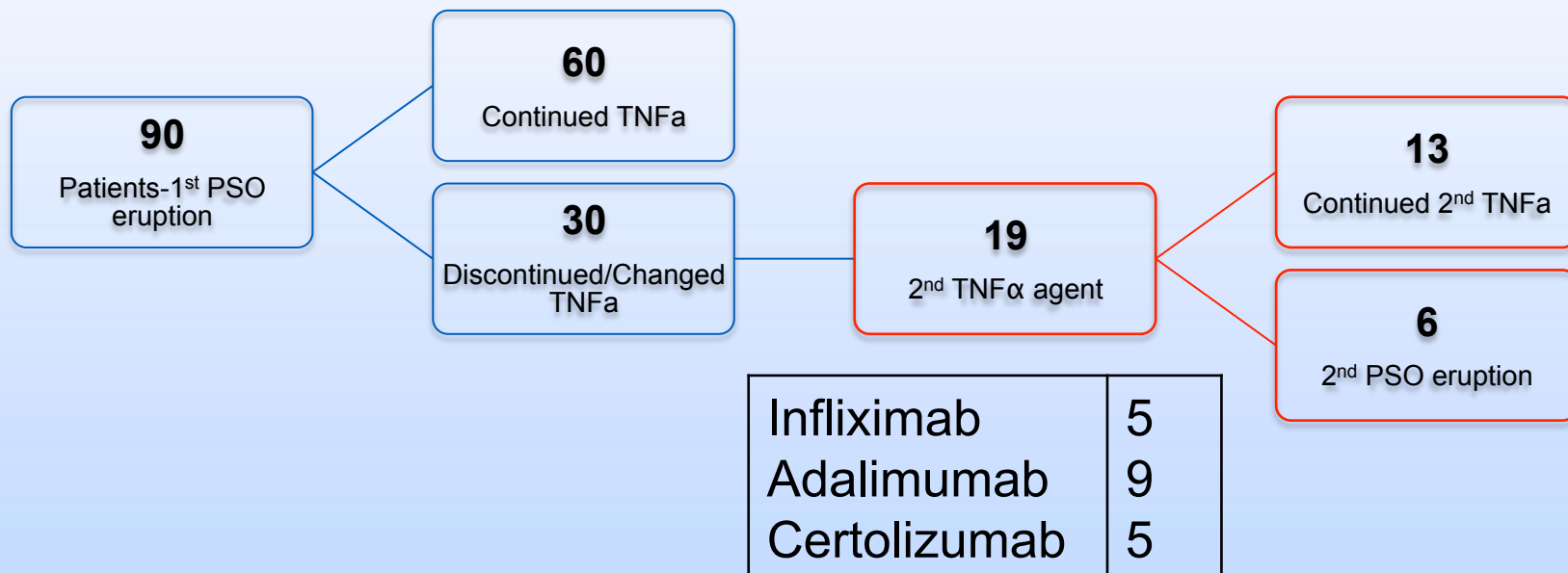


TNF- α Antagonist Discontinued/Changed

- 33% discontinued/changed initial anti-TNF- α agent
 - 73% complete/partial remission
 - 20% no improvement

- Reason for change or discontinuation
 - PSO 43%
 - PSO+1⁰ Disease 27%
 - 1⁰ Disease 17%
 - Other 13%





Second PSO Eruption (N=6)

- Recurrent PSO Eruption

- 6/19 patients (32%)

Infliximab	1
Adalimumab	2
Certolizumab	3

- Treatment

- 100% topical corticosteroids
- 1 patient received phototherapy, another oral Acitretin

- ALL patients discontinued 2nd TNF- α antagonist

- Due to PSO eruption

Conclusions

- TNF- α antagonist-induced PSO eruptions occur across a spectrum of pediatric conditions
- Majority of patients (67%) continued initial anti-TNF- α agent
 - Treatment potential \rightarrow Consider systemic therapies
- Class effect in TNF- α antagonist-induced PSO

References

1. Denadai, R., et al., Induction or exacerbation of psoriatic lesions during anti-TNF-alpha therapy for inflammatory bowel disease: a systematic literature review based on 222 cases. *J Crohns Colitis*, 2013. 7(7): p. 517-24.
2. Sherlock, M.E., et al., Infliximab-Induced Psoriasis and Psoriasiform Skin Lesions in Pediatric Crohn Disease and a Potential Association With IL-23 Receptor Polymorphisms. *Journal of Pediatric Gastroenterology and Nutrition*, 2013. 56(5): p. 512-518.
3. Eickstaedt, J.B., et al., Psoriasis and Psoriasiform Eruptions in Pediatric Patients with Inflammatory Bowel Disease Treated with Anti-Tumor Necrosis Factor Alpha Agents. *Pediatr Dermatol*, 2017. 34(3): p. 253-60.



Questions & Discussion