

Palmoplantar pustular Psoriasis induced in a patient treated with infliximab for Crohn's disease

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History

- The Crohn was diagnosed in 1994 at the age of 23 Y.
- Initially on steroid. This stopped due to side effect.
- 18 inches resection of large bowel and illectomy after this.
- Fast recovery and Crohn disease was in remission.
- B12 injection and Questran(Colestyramine) were prescribed.
- abscess in 2012 consequently an operation to remove and clean(fitted a Seton).other small abscess developed later but they settled with Abs.
- the Croh's consultant recommended Infliximab treatment in Sept 2013.
- Treatment commenced in March 2014.
- She got skin rash on her feet and hands after 4 sessions of infliximab. Hands involved first. 26th and 27th June 2014.
- Seen by her own GP and diagnosed with Hand, Foot and mouth disease.
- The emergency GP on 14th July gave her oral antibiotics (Flucloxacillin) 500mg 4 times a day for 7 days and an antibiotic cream (Fucidin) to rub.
- A week later her hands had cleared up considerably but feet were worse.
- the emergency GP on 19th July continued the above.
- Infected Contact Dermatitis 20/07/14 in A&E, fucibet given.
- Seen by me two weeks later and given clobetasol propionate:
- Reviewed in one week time and given active heal(hydrocolloid).



Skin presentation after treatment by ABS and fucidin followed by fucibet



What is the specific therapeutic challenge in this patient ?

- Diagnosis challenge: hand,foot& mouth disease? Infected contact dermatitis? Psoriasis? PPP?drug induced PPP? Drug reaction?
- Patient already seen by other health professional and given medication and topical treatment which can change the initial clinical presentation.
- History taking and examination are paramount in diagnosis!
- Dilemma of therapeutic options as initial diagnosis of infliximab induced PPP. Paradoxical effect of anti-TNF!
- Question to be answered: should we stop the infliximab or choose a treatment to commence without discontinuation?
- This needs an MDT meeting?
- Which therapeutic option are available on this case? Topical? Systemic? With or without continuation of Anti-TNF?
- If topical< which topical to choose?

Evidence for use of selected treatment

Author(s)	Type of evidence e.g. RCT, guidelines	Details of study or publication	Key findings & conclusions
Alan Menter et al April 2009	randomized 4-week comparative study	the efficacy and safety of clobetasol propionate 0.05% spray to calcipotriene 0.005%, betamethasone dipropionate 0.064%	75% clear by CT in comparison to C-BD 45%, Adverse events 31% for CP spray and 33% for C-BD ointment
Mason et al :Topical treatments for chronic plaque psoriasis (Review)	Cochrane review	<i>Cochrane Database of Systematic Reviews</i> 2013	Corticosteroids perform at least as well as vitamin D analogues
M. Sevrain et al 2014	Systemic review	evidence-based recommendations and expert opinion	potent or very potent topical corticosteroids with Occlusion(no PsA) With PsA(NSAID + topical corticosteroids) first line
Chalmers R et al:Interventions for chronic palmoplantar pustulosis (Review)	Cochrane review	<i>Cochrane Database of Systematic Reviews</i> 2009	combination of PUVA and retinoids is better than the individual treatments. The use of topical steroid under hydrocolloid occlusion is beneficial
NICE guidelines 2012, updated evidence 2014	Guidelines	guidelines	first-line topical therapies (such as potent corticosteroids with vitamin D analogues, dithranol and tar preparations). Very potent corticosteroid if the above fails
Cullen et al 2011 Dr. F Didar	Retrospective review	Identification of anti-TNF-induced psoriasis in inflammatory bowel disease,management	41% of those who developed psoriasis while on anti-TNFs responded to topical therapy.

Review of evidence: clinical implications

- The use of very potent corticosteroid must be limited to 4 weeks and in specialist settings under careful supervision.(NICE guidelines)
- Use of topical treatment(mostly potent corticosteroid) with or without Anti-TNF continuation. Cullen et al 2011
- Risk of dermal atrophy.(Cochrane review).need for a break after 4 weeks and using other topical like Vitamin D antagonist.(NICE guidelines)
- Any treatment decision should be made jointly by the gastroenterologist and the dermatologist. Cullet et al 2011
- Choice of long-term maintenance treatment, if response is clearance or nearly clear.(Cochrane review)
- The use of very potent corticosteroid under hydrocolloid occlusion.(Cochrane review)

Recommendations for clinical practice

- Topical corticosteroid(potent or very potent) can be chosen as first line of treatment for anti-TNF induced plantopalmar psoriasis or other cutaneous presentation.
- In case of extensive skin presentation, PUVA should be consider to avoid systemic absorption of corticosteroid.
- Use of this topical treatment limited for 4 weeks with break in which uses of other topical like vitamin D antagonist is recommended.
- The use of Anti-TNF may not stop based on response to the topical treatment.
- Topical corticosteroid usage under hydrocolloid occlusion deliver better out come.
- Betamethasone + vitamin D antagonist is more efficient than Betamethasone itself. It can be used as first line of treatment.
- Close supervision is required in usage of very potent corticosteroid.
- Therapeutic approach need to be discussed in a MDT meeting.

Reflection

- As the use of TNF antagonists has increased, new cutaneous reactions like psoriasis are being seen more in the practice. I am now aware of this.
- I watch closely any patients who suffer from rheumatoid arthritis, ankylosing spondylitis, psoriasis, Crohn's disease, and rarely psoriatic arthritis on anti-TNF for any skin presentation like psoriasis (in this case PPPP).
- I inform my patients accordingly to look for sign and symptoms in their skin.
- I need to have Close communication with rheumatologist, oncologist and gastroenterologist in order to manage and treat the dermatological side effect of Anti-TNF treatment in primary care dermatology.
- NICE Guidelines and algorithms are very useful and practical in choosing appropriate treatment for different types of psoriasis. I need to up date myself from time to time with the guidelines.
- A good history taking is very beneficial in diagnosis and consequently treatment of skin disorders induced by drugs.
- I am more aware of practicality and efficacy of potent corticosteroid treatment with occlusive dressing like hydrocolloid occlusion.
- My first topical treatment of choice would be combination of betamethasone and vitamin D antagonist. In case of no response I would choose very potent corticosteroid with close supervision for 4 weeks.
- I would refer these kind of patient for systemic therapy or PUVA if they fail first line of therapy namely topical treatment. (MDT meeting needed)

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