# Dermatological manifestations of ulcerative colitis in Sri Lanka - how different is it?

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### Summary

The objective was to determine, the dermatological manifestations of ulcerative colitis (UC) in a Sri Lankan population; to compare our results with a Sri Lankan control group and with data from Western studies. 38 patients with a diagnosis of UC participated. Unlike in Western countries, Erythema nodosum and Pyoderma gangrenosum were not seen. But other skin manifestations not described in Western literature and not seen in the control group were found. Many of these turned out to be side effects to the commonly used drug sulphasalazine.

#### Introduction

Ulcerative colitis is a fascinating illness well known to give rise to multi-systemic manifestations. Unlike in the past, this disease is seen much more commonly today. UC can have many dermatological manifestations. Our objectives were to study these, in a Sri Lankan population<sup>2</sup> to compare our results with a Sri Lankan control group and<sup>3</sup> with data from Western studies.

#### Methods

38 patients with diagnosis of ulcerative colitis were identified from those attending the Profes-

sorial Unit Surgical Out Patients Clinic, National Hospital of Sri Lanka (NHSL). All of them underwent a detailed interview and a detailed clinical examination. Those who complained of or found to have a dermatological manifestation were referred to Dermatology clinic, Ward 13, NHSL, and were seen by a Senior Registrar and a Consultant. Where appropriate, skin biopsies were taken and send for histology.

These patients were compared with an age, sex matched group of patients with bleeding per rectum attending the Rectal Clinic, Professorial Surgical Unit, NHSL, who did not have ulcerative colitis.

The results we obtained were compared with the results of the studies done in Western countries to determine whether there was a statistically significant difference in the pattern in Sri Lanka.

#### Results

38 patients with UC participated in the study. Current age ranged from 23-73 years with a mean age of 42.4 years.

Our female to male ratio was 3:1. The duration of disease ranged from 1-22 years. (Figure 1)

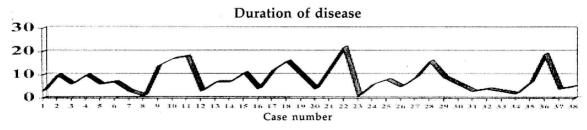


Figure 1. Out of these 38 patients, 11 patients were found to have dermatological problems as given below.

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#### Table 1

- Case 2 Contact dermatitis for Nickel and Cobalt (watch metal and handbag)
- Case 3 Lymphocytic vasculitis
- Case 11 Venous pigmentation
- Case 15 Lichenoid eruption due to Sulphasalazine
- Case 17 Lichen striatum
- Case 19 Vitiligo of both legs, Tinea corporis and cruris, eczema of L/foot
- Case 24 Eczema
- Case 27 Lichen planus
- Case 30 Tinea cruris
- Case 34 Papular urticaria, Xerosis
- Case 37 Photo dermatitis aggravated by Sulphasalazine

A patch test was done on Case No.2. Skin biopsies were done on Case Nos. 3, 11, 15, and 17.

In the age and sex matched non ulcerative colitis control group of 38 patients only 2 patients had dermatological problems and they were diagnosed to be having Pityriasis versicolor.

#### Discussion

Western literature on studies done on Ulcerative Colitis show Erythema nodosum (2%), Pyoderma gangrenosum (0.5%), and apthous ulcers as the commonest dermatological manifestations 1,2,3,4,5

In our study group of 38 UC patients we did not come across even a single patient with the above. This was not statistically significant due to the relatively small number of patients in the study.

The other skin manifestations that we came across in the study group (Table 1) and not in the control group are not described in relation to UC in Western literature.

The drugs that are prescribed to control UC are also well known to give rise to dermatological

manifestations. One such commonly used drug is sulphasalazine, an aminosalicylate<sup>6</sup>. It's skin manifestations are given below in Table 2.

## Table 2. Skin manifestations following Sulphasalazine treatment<sup>7</sup>

- Acute generalized exanthematous pustulosis
- 2. Angioedema
- 3. Aphthous stomatitis
- 4. Bullous eruption
- 5. Bullous pemphigoid
- 6. Chielitis
- 7. Dermatitis
- 8. Eczematous eruption\*
- 9. Erythema multiforme
- 10. Erythema nodosum
- 11. Erythroderma
- 12. Exanthems
- 13. Exfoliative dermatitis\*
- 14. Fixed eruption
- 15. Flushing
- 16. Hyperhydrosis
- 17. Lichen planus\*
- 18. Lupus erythematosus
- 19. Necrosis
- 20. Photo sensitivity\*
- 21. Pigmentation
- 22. Pruritus
- 23. Pruritus vulvae
- 34. Psoriasis
- 25. Purpura
- 26. Pustular eruption
- 27. Raynaud's phenomenon
- 28. Steven Johnson syndrome
- 29. Toxic epidermal necrolysis
- 30. Urticaria
- 31. Vasculitis\*
- 32. Vulvo-vaginitis
- 33. Xerosis\*
- 34. Hair-alopecia
  - \* Conditions seen in our study population

One of our patient's developed extensive exfoliative dermatitis, for Sulphasalazine, which needed inward management. Desensitization for the above drug had been tried as it was crucial for the patient to continue taking the drug for disease control. Even this had failed, and at the time of the study he was on mesalazine (5 amino salicylic acid) a component of sulphasalazine (6) and was in remission.

#### Conclusions

Unlike in the Western countries, Erythema nodosum and Pyoderma gangrenosum were not seen in our population. But other skin manifestations not described in Western literature, and not seen in the control group, were found. Many of these turned out to be side effects to the commonly used drug sulphasalazine.

The authors are aware, that the relatively small number of patients who participated, was

a major drawback. How ever the absence of any other published data on this subject made it important to record the findings. Hence large group trials are needed in the future to carryout further in depth studies on this subject.

#### References

- Ulcerative colitis, Bailey and Love's short practice of surgery, 21<sup>st</sup> edition, 1992; 1139-1146.
- Surgery of anus, rectum and colon, JC. Galigher 5th Ed. Bailliere Tindall 1984; 805-971.
- Futami H, et. al. Pyoderma Gangerenosum complicating UC. Journal of Gastroenterology 1998; 33(3): 408-11.
- Dwarakanth AD, et al. Sticky neutrophils, pathergic arthritis, and response to heparin in pyoderma gangrenosum complicating UC, GUT 1995; 37(4): 585-8.
- Von den Driesch P, Pyoderma gangrenosum: a report of 44 cases with follow up. British Journal of Dermatology 1997; 137(6): 1000-5.
- 6. British National Formulary 1994; 27: 41.