

Case Report**Association Of Butterfly Rash & ANA
Positivity With IBD.****ABSTRACT:**

A 30 year old female presented with 3 months history of fever- on&off, hyperpigmented skin lesions over face, weight loss, myalgia. With 2 weeks history of diffuse pain abdomen with diarrhea. Past & family history unremarkable. Regular menstrual cycles. Nonsmoker. On examination – vitals stable. BMI- 15.26kg/m². Pallor +, Malar rash , Atropic tongue, Nuckle pigmentation seen. Abdomen is doughy, diffusely tender, mild ascites seen. Routine blood investigations showed – ESR- 45, Hb-9.9gm/dl, microcytic hypochromic anaemia. LFT: Total protein- 5.4gm%, Albumin- 2.5gm%. USG of abdomen & pelvis showed –thickened small bowel wall, minimal ascites. CECT abdomen showed – Irregular mural thickening of terminal ileum & ileocecal junction, with pre & para aortic abdominal lymphadenopathy. Ascitic fluid analysis: 800 cells- 80% lymphocytes, protein-4.7gm/dl, ADA- 51.5U/L, No organisms found on culture or gram staining, no malignant cells. TSH- 13uIU/ml. ANA – Positive(++++). ANTI DsDNA-negative. Anti Smith antibody – negative. Smooth muscle antibody – negative. Colonoscopy with biopsy done showed features of Inflammatory bowel disease. Inj. Methyl prednisolone 1gm – 5 days followed by oral steroids started, along with thyroxine for hypothyroidism. Patient improved & followed up OPD basis. Patient is asymptomatic.

CONCLUSION: Butterfly rash , positive ANA can be seen with IBD. Not only graves, association of hypothyroidism are also seen with IBD.

Abbreviations: ANA- antinuclear antibody, IBD- inflammatory bowel disease.

INTRODUCTION

Inflammatory bowel disease (IBD) is a chronic recurrent disease characterized by intestinal mucosal inflammation and includes ulcerative colitis (UC) and Crohn's disease (CD). Almost one fourth of IBD patients suffer from extra-intestinal manifestations, including oligoarticular or polyarticular non-deforming peripheral arthritis, spondylitis or sacroilitis , episcleritis or uveitis,

erythema nodosum , pyoderma gangrenosum , sclerosing cholangitis and thromboembolic events. On the other hand, systemic lupus erythematosus (SLE) is an autoimmune disorder occurring predominantly in women during reproductive years. It is a multisystem disease with numerous clinical manifestations such as skin rashes, photosensitivity, oral ulcers, arthritis, serositis , renal, neurologic and hematologic disorders. The characteristic immunologic findings include the presence of antinuclear antibodies (ANAs), anti-DNA, anti-Sm and antiphospholipid antibodies.⁽¹⁾

Systemic lupus erythematosus(SLE) and Crohn's disease(CD) are multisystem diseases characterised by wide spread tissue damage.⁽⁸⁾ The diseases may have gastrointestinal(GI) manifestations, laboratory results, and radiographic findings that appear similar and consequently differentiating between GI involvement in CD and in SLE may be difficult. We present the case presenting with overlapping features of SLE and CD.

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49 CASE REPORT

50 Informed consent was taken from patient.

51 A 30 year old female presented with 3 months h/o fever – on & off, mild to moderate grade; hyperpigmented skin lesions over face- which are photosensitive; myalgia and significant weight loss; With 2 weeks h/o diffuse pain abdomen- colicky in nature, associated with diarrhea. Pain abdomen preceded & relieved following defecation. H/o 2 episodes of passage of blood in stool in last 2 days. No h/o other bleeding manifestations or rash. Adequate urine output was present. Menstrual cycles were regular. Non smoker. Past & family history unremarkable.

59 On Examination - Vitals stable. BMI-15.26kg/m². Pallor +, Malar rash (FIG .1A), Atrophic tongue(FIG.1B), Nucleolar pigmentation, Erythema nodosum(FIG.1C) like skin lesions over anteromedial aspect of leg were seen. Fundus- normal. Abdomen – diffusely tender, mild ascites was present. Other systems were normal.

64 Laboratory investigations – Hb-9.9gm/dl, ESR-45, Total count- 4300/cumm, MCV- 70fl, Platelet count- 1.92 lakhs/cumm, Differential count- P-73,L-22,M-3,E-2,B-00; Peripheral smear- microcytic hypochromic anaemia; LFT – Total protein-5.4gm%, Albumin-2.5gm%; RFT- Serum urea – 27mg/dl, Creatinine –

68 0.5mg/dl; Sodium- 137mmol/L, Potassium- 3.3 mmol/L, Chloride – 99mmol/L;
 69 Urine analysis – normal; RBS- 94 mg/dl; Blood group- AB positive; Thyroid
 70 profile- Free T3 -2.53pg/ml, Free T4 - 1.32ng/dl, TSH -13uIU/ml; ANA –
 71 Positive(++++), Anti-DsDNA – Negative, Anti smith antibody –
 72 negative(1.91RU/ml), Smooth muscle antibody – negative, Other components
 73 of ANA profile – negative; Direct & Indirect Coombs test – negative;C-reactive
 74 protein –negative; RA factor – negative; HBsAg- Non reactive; HCV RNA –
 75 Negative; HIV – Non reactive;

76 Radiological investigations – USG abdomen & pelvis- Thickened small bowel
 77 wall, minimal ascites; CECT abdomen & pelvis – Irregular mural thickening of
 78 terminal ileum & ileocecal junction- maximum thickness-10mm, extending
 79 over length of 3cm(FIG.2A), with pre & para aortic lymph node enlargement,
 80 largest measuring – 1.5*0.6cm(FIG.2B); Cardiac Evaluation – Normal;

81 Ascitic fluid analysis – 800 cells- 80%(L),20% mesothelial cells, no malignant
 82 cells; Protein – 4.7gm/dl, sugar – 85mg/dl; No organisms found on Gram
 83 staining & Culture; Negative for AFB; ADA – 51.5 U/L;

84 Colonoscopy – Showed ulcerative lesion at terminal ileum(FIG.2C), Biopsy from
 85 same site taken & Histological Examination showed Features suggestive of
 86 Inflammatory Bowel disease – i.e Crohn’s Disease(FIG.2D).;

87 Counselling of patient regarding – Disease, its complications, treatment
 88 options & its side effects is explained in detail. Advised for regular follow up at
 89 the time of discharge.

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91 **DISCUSSION:**

92 The peak age of onset of UC & CD is between 15- 30yrs. A second peak occurs
 93 between 60 – 80yrs.⁽⁷⁾ CD can affect any part of the GI tract from mouth to the
 94 anus. In 75% of the patients with small intestine disease , terminal ileum is
 95 involved in 90%.⁽⁷⁾ In CD involving Ileocecal region, severe inflammation of the
 96 ileocecal region may lead to localised thinning of wall with microperforation.-
 97 responsible for exudative ascitic fluid.⁽⁷⁾ Erythema nodosum(EN) occurs in upto
 98 15% of CD and 10% of UC patients⁽⁸⁾ The rate of thyroid disorders is reported
 99 to be increased in patients with IBD than normal population. Mustafa yakut et
 100 al study showed Thyroid gland disease in 14/146(9.5%) IBD patients.

Hashimoto thyroiditis has been found in 4(2.7%) IBD patients, in that one patient was Hypothyroid.⁽⁶⁾

Table 1- shows Comparison of reported patients with SLE complicating Crohn disease.

CONCLUSION:

The diagnostic criteria for CD and SLE overlap, making them difficult to diagnose correctly. It is important to consider the possibility of CD in patients who have clinical features of SLE like Butterfly rash, positive ANA with GI manifestations. Not only Graves, association of Hypothyroidism following Hashimotos thyroiditis also seen with IBD.

REFERENCES:

1. Konstantinos H.Katsanos, Paraskevi V.Voulgari, Epameinondas V.Tsianos: Inflammatory bowel disease and lupus: A systematic review of the literature. Journal of Crohn's and Colitis (2012) 6, 735-742 .
2. Johnson DA, Diehl AM, Finkelman FD et al: Crohn's disease and systemic lupus erythematosus. Am J Gastroenterol 1985, 11:869-70.
3. Nagata M, Ogawa Y, Hisano S et al: Crohn's disease in systemic lupus erythematosus: a case report. Eur J Pediatr 1989, 148:525-6.
4. Buchman AL, Wilcox CM: Crohn's disease masquerading as systemic lupus erythematosus. South Med J 1995, 88:1081-3.
5. Nishida Y, Murase K, Ashida R et al: Familial Crohn's disease with systemic lupus erythematosus. Am J Gastroenterol 1998, 93:2599- 601.
6. Mustafa Yakut, Yusuf Üstün, Gökhan Kabacan et al: Thyroid Disorders in Patients with Inflammatory Bowel Diseases. *International Journal of Clinical Medicine*, 2011, 2, 89-92.
7. *Harrison's principles of Internal Medicine 18th ed.* Inflammatory bowel disease(295), 2477-2495.

8. Nitzan O, Elias M, Saliba WR: Systemic lupus erythematosus and inflammatory bowel disease. Eur J Intern Med 2006, 17:313-8.

Fig 1 : A. MALAR RASH
B. ATROPIC TONGUE
C. ERYTHEMA NODOSUM

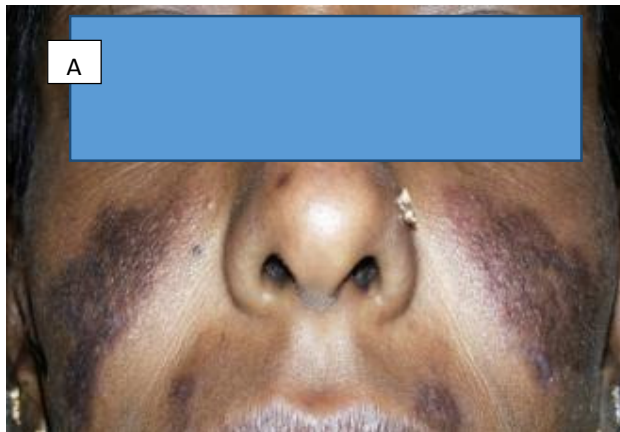
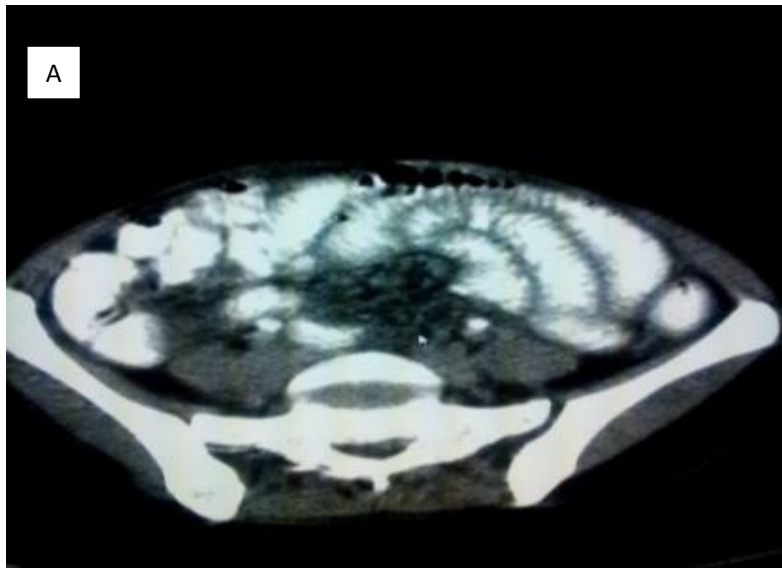


FIG 2: A. CECT ABDOMEN SHOWING IRREGULAR MURAL THICKENING OF TERMINAL ILEUM & ILEOCECAL JUNCTION.
 B. CECT ABDOMEN SHOWING ENLARGED PRE & PARA AORTIC LYMPH NODE ENLARGEMENT.
 C. COLONOSCOPY SHOWING ULCERATIVE LESIONS AT TERMINAL ILEUM.
 D. HPE OF BIOPSY TAKEN FROM ULCERATIVE LESION SHOWED FEATURES SUGGESTIVE OF CROHN'S DISEASE.



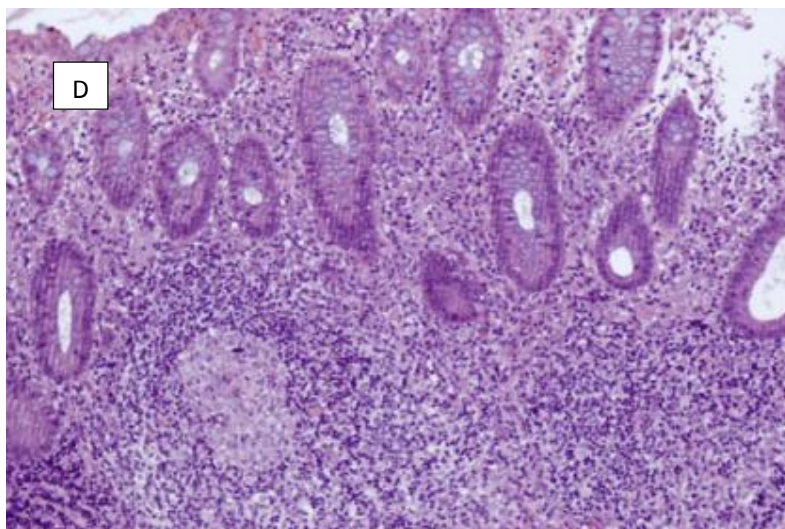


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165 Table 1: Comparison of reported patients with SLE complicating Crohn disease

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Patient	Age/sex	SLE disease duration	Immunological findings	Symptoms	ESR (mm/hr)	Colonoscopy Findings	Result of Biopsy	Treatment	Reference
1	28M	7yrs	ANA 1280x Anti-DNA 160x	Diarrhea Pyoderma gangrenosum	89	Deep linear ulceration, Psuedopolyps, Skip lesions	Acute and Chronic inflammation	mPSL 40mg/d.d iv	(2)
2	15F	3yrs	ANA 1280x Anti-DsDNA 50x	Abdominal pain Diarrhea Blood stained stool	68	Multiple ulcers with linear ulcer, Skip lesion, Psuedopolyps	CD	Salazosulphapyridine	(3)
3	55F	12yrs	ANA 80x Anti-DsDNA 80x	Intermittent hematochezia, Tenesmus and loose bowel movements	35	Multiple ulcers with linear ulcer, diffuse aphthous ulcers	CD	Prednisone	(4)

4	25F	She developed SLE 4yrs after developing Crohn's disease	ANA 160x Anti-DsDNA 800IU/ml pANCA positive	Watery diarrhea, Lower Abdominal pain, Perianal Abscess	N/A	Longitudinal ulcers and mucosal erosions	CD	Salazosulphapyridine 3gm/d	(5)
5	30F	No history of SLE	Positive result of ANA Anti-dsDNA-Negative	Diarrhea Abdominal pain Malar rash	45	Ulcers at terminal ileum	CD	mPSL 1gm/d-5 day F/b oral Prednisone 1mg/kg	The present case

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