

A Rare Case of Systemic Lupus Erythematosus with Autoimmune Hepatitis Leading to Hepatic Cirrhosis

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Abstract: *Systemic Lupus Erythematosus SLE and Autoimmune Hepatitis AIH are complex autoimmune disorders that, when coexisting, pose significant diagnostic and therapeutic challenges. This article explores a case of a 38-year-old female with a history of SLE and hypothyroidism who presented with abdominal pain and breathing difficulties. Extensive clinical, serological, and radiological investigations revealed the coexistence of SLE and cirrhosis of the liver with esophageal varices, likely as a consequence of AIH. This case highlights the importance of distinguishing between SLE-associated hepatitis Lupoid hepatitis and AIH associated with SLE, as their disease courses differ. The article underscores the limitations of biochemical parameters in differentiation and emphasizes the diagnostic value of liver biopsy.*

Keywords: Systemic Lupus Erythematosus, Autoimmune Hepatitis, Coexistence, Diagnosis, Liver Biopsy

1. Introduction

- SLE is an autoimmune disease wherein organs and cells undergo damage caused by auto antibodies and immune complexes.
- Prevalence in India: 14 to 60 per 100,000.
- Autoimmune hepatitis (AIH) clinically, serologically and histologically represents a chronic relapsing hepatitis, associated with a plasma cell hepatic infiltrate, hypergammaglobulinaemia and positive autoantibodies.
- Prevalence in India around 1.50%.

2. Case Presentation

38 year female from Dibrugarh, Assam, non alcoholic and homemaker by occupation, who is a known case of Hypothyroidism since 10 years and SLE since 5 years under irregular medication (tab prednisolone 30mg once daily) presented to AMCH OPD with Pain abdomen since April 14, which was dull aching and generalised in nature and gradual in on set and Breathing difficulty since 15 days .

3. Examination

- Average in built, moderate nutrition
- Pallor present
- Erythematous macular rash on cheek sparing nasolabial fold
- Spleen was palpable 2cm below left costal margin

4. Investigation

- 1) ANA profile:
 - dsDNA, ssA/Ro52 , U1
 - snRNP ++
 - smD1+ ++
 - ssA/Ro60 +

- Histones and pm SCL +/-
- 2) TSH-17.96 ,T3-1.57, T4-74.44
 - 3) LFT : Total bili-1.81, Albumin-2.87, AST -29.1, ALT-11.7, ALP -243 ,yGT-39
 - 4) USG abdomen- Cirrhotic liver with portal hypertension, mild splenomegaly & minimal ascites
 - 5) UGI Endoscopy-grade 2 esophageal varices
 - 6) CECT Abdomen- hepatic parenchymal disease, gross splenomegaly
 - 7) 2D ECHO-Diastolic dysfunction grade 1, mod TR, Mod PAH, enlarged RA and RV, LVEF-65%
 - 8) Fibroscan (liver)-liver stiffness of 9.1 kPa (F2-F3) – suggestive of fibrosis

5. Observation

From history, Examination, Laboratory and Radiological investigation, it was found to be a case of SLE with co existing Cirrhosis of liver with Esophageal Varices , probably as a consequence of Autoimmune Hepatitis.

During the hospital stay patient was started on steroids.Patient responded and symptomatically improved.

6. Conclusion

- 1) Patients presenting with SLE and Autoimmune Hepatitis causes a diagnostic and therapeutic dilemma
- 2) It is important to distinguish between SLE associated hepatitis (Lupoid hepatitis) and Autoimmune Hepatitis associated with SLE
- 3) Course of disease is different in both entities
- 4) Most of the biochemical parameters are inconclusive in differentiating the two entities , however Liver Biopsy is diagnostic

References

- [1] Firestein & Kelly's Textbook of Rheumatology
- [2] Harrison's Principles of Internal Medicine