



CASE REPORT: SYSTEMIC LUPUS ERYTHEMATOSUS FLARE WITH SPONTANEOUS INTRACRANIAL BLEED IN DENGUE FEVER.

General Medicine

Arif Hoda

Ashwini Patankar* *Corresponding Author

Santwana

Chandrakar

Anisha Bashir

ABSTRACT

In SLE Intracerebral haemorrhage is seen only in 0.4-7% of cases(1). Spontaneous intracranial bleed, especially subarachnoid haemorrhage (SAH) is rare. We present a case of dengue fever with Systemic lupus erythematosus flare who had Intracranial bleed with SAH and massive pericardial effusion.

KEYWORDS

INTRODUCTION

A 21-year-old married female, from Navi Mumbai, India came with complaints of fever with chills, right sided abdominal pain and decreased frequency of micturition in the last five days. She also had complaints of hair loss since last 8 months. On admission the patient had fever of moderate grade, intermittent with no aggravating or relieving factors. Her abdominal pain was localised to right hypochondrium and progressively worsened.

The patient had no past history of any chronic disease or co-morbidity. She had no significant family history. She had no history of spontaneous abortion and had no menstrual complaints. She has one living child born of normal vaginal delivery in a hospital.

On examination, the patient had malar rash (butterfly pattern) on face, multiple maculopapular rashes on shin of tibia of the patient and alopecia. Initially the patient was vitally stable, she had tender hepatomegaly and moderate splenomegaly, with no abdominal guarding or rigidity. Her heart sounds were muffled. There were no focal neurological signs and normal ophthalmological examination. Her respiratory examination was unremarkable.

On the first day her haemoglobin was 8.7mg/dl, total count was 9300/mm³, platelets were 190000/mm³, her creatinine was 0.9 mg/dl. Her liver function tests however were abnormal, with total bilirubin of 2, direct bilirubin 1.6, SGOT of 594.2 and SGPT of 119.9 and alkaline phosphatase of 714.6 and raised ESR and CRP.

Fever profile too was done in which dengue IgM was positive.

Her chest x-ray was suggestive of pericardial effusion and echocardiography revealed the same findings.

Her ultrasonography was suggestive of hepatosplenomegaly and acalculous cholecystitis. CECT abdomen was done for further evaluation, which revealed similar findings and demonstrated massive pericardial effusion.

On second day of admission the patient had become breathless and was shifted to intensive care unit.

Pericardiocentesis with pigtail catheter was done, as drainage of pericardial effusion is known to be beneficial (2) The pericardial fluid was sent for examination. It was exudative in nature.

Clinical and investigational findings raised strong suspicions of underlying collagen vascular disorder and ANA was sent which happened to be 4+ positive, speckled with a of dilution 1:2560 and ds-DNA was positive. A diagnosis of systemic lupus erythematosus was established as per the SLICC 2012 criteria in which our patient had : 1) acute cutaneous lupus i.e malar rash 2) Non-scarring alopecia 3) Pericardial effusion 4) Thrombocytopenia and 5) ANA+ (3) (more than 4 criteria of 17 are required to establish SLE)

After 4 days of intensive care unit stay due to sudden worsening of mental status and hypoxia the patient was intubated in the intensive care unit. Ophthalmic examination depicted unequal pupils (right 2-3 mm and left 3-4 mm) sluggishly reacting to light, MRI scan brain was done which revealed large mixed hyperacute and acute subdural haemorrhage in right fronto-temporal region with significant mass effect, midline shift and herniation with subarachnoid haemorrhage over bilateral fronto-parietal lobes, sylvian fissure, inter-hemispheric fissure and basal cisterns. Neurosurgery opinion was taken for the bleed but conservative management was advised, due to thrombocytopenia and poor general condition. Patient was started on injectable mannitol and injection methylprednisolone. Over the course of hospital stay, the patient had a fall in platelets and haemoglobin and was transfused with single donor platelets and packed red blood cells. Patient was then referred to higher centre for further management.

DISCUSSION

Systemic lupus erythematosus is an autoimmune disorder with multiple and multisystemic manifestations. Various criteria have been used for diagnosis of SLE. Among these ACR and SLICC criteria have been used maximally for diagnosis(3). In our case report both of these criteria were fulfilled in establishing the diagnosis. Our patient had massive pericardial effusion which is often the first manifestation and is seen in about 40% of cases of SLE(4). Dengue is known to cause flares of SLE which can lead to such manifestation.(5) We strongly suspected the flare of SLE as patient had malar rash right from the beginning and her SELENA-SLEDAI score (marker of disease activity) increased during the course of her hospital stay. Dengue viremia is known to produce antibodies triggering autoimmune diseases in genetically predisposed individuals.(6) The flare up of SLE and associated thrombocytopenia is a known cause of spontaneous intracranial bleed which was seen in our case as well.(1) Subarachnoid haemorrhage however is a very rare manifestation in SLE as well as in dengue which too was seen with our case(7).

CONCLUSION

Dengue is known to trigger autoimmune disorders like lupus. Systemic lupus erythematosus with dengue fever can lead to dreaded complications like intracranial hemorrhage and can progress with a high degree of mortality.

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