



CASE REPORT ON ROCKY MOUNTAIN SPOTTED FEVER

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ABSTARCT: A 25 year female came with complain of generalised body ache and anaemic symptoms, while treating the symptoms, there was no evidence of any specific disease which can be correlated with the symptoms and the routine biochemical investigation, with some physical examination and the type of skin lesion studied, we gave the reports of WEIL FLIX TEST and it showed positive.

INTRODUCTION:

Rocky Mountain spotted fever (RMSF) is a potentially fatal infectious disease caused by the gram-negative intracellular bacterium *Rickettsia rickettsii*.¹ Rickettsiosis consists of a spectrum of vector borne diseases caused by small Gram-negative obligate intracellular bacteria which includes epidemic typhus, scrub typhus and spotted fever. Rickettsial diseases have been reported from various parts of India namely Jammu and Kashmir, Uttarakhand, Maharashtra, Kerala, Tamil Nadu, Assam and West Bengal.² *R. rickettsia* transmits into human hosts by the bite of an infected tick. Rickettsia preferentially infects the vascular endothelial cells lining small and medium vessels throughout the body, causing the systemic symptoms and high mortality occurs with Rocky Mountain spotted fever. The infection of endothelial cells leads to disseminated inflammation, loss of barrier function, and altered vascular permeability throughout the body. This condition leads to fever, myalgia, central nervous system symptoms such as headache and confusion, rash, and cardiovascular instability that can be present in patients with Rocky Mountain spotted fever.

CASE REPORT:

A 25 year old female working as a housekeeper presented to the Hospital Emergency Department with general malaise since 4 month associated with body ache and weakness, a subjective fever associated with chills and severe headache from the last 15 days. On general examination, there was no any lesions over the body. The skin colour was mild pallor which referred to be as Anaemia. On admission the patient had spiked the fever of 101⁰ F, and showed hypotension showing the blood pressure of 98/70.

On laboratory investigation patient showed hypo uremic with urea levels of 11.00 mg/dl and hypokalaemia showing potassium level of 3.20 milli Equivalent/L. on relating the laboratory and physical examination, the provisional diagnosis showed to the dehydration. All laboratory investigation are added over table 1.0. On co-relating the laboratory and physical examination the patient was started with the intravenous ceftriaxone

antibiotic with dose of 2gm diluted with NS over 24 hour. For pain-relief Injection INFUPAR was added with dose of 1 pint over 8 hour.

On laboratory investigation showing abnormal levels of the SGOT (346), it was correlated with the CT of abdomen and chest, its observation showed liver appears enlarged measuring 15.4 cm in size. Focal area of fatty infiltrations noted along falciform ligament. On this patient was started with dose of 100 mg of Cap. DOXYCYCLINE twice a day.

PARAMETER	DAY1	DAY2	REFERENCE RANGE
S. Total Bilirubin	0.8	1.0	0.1-1.2 mg/dl
S. Direct Bilirubin	0.3	0.4	0-0.4 mg/dl
S. indirect Bilirubin	0.5	0.6	0.1-0.8 mg/dl
S.SGPT	52.00	23	0-40 IU/L
S. SGOT	75.00	246	0-37 IU/L
S. UREA	11.00	19	14-40 mg/dl
S. CREATININE	0.93	1.05	0.6-1.2 mg/dl
S. SODIUM	135	144	135-145 mEq/L
S. POTASSIUM	3.20	3.30	3.5-5.1 mEq/L
ESR	18		0-12 mm
HB	11.40	10.24	11-15 mg/dl
WBC	7300	7900	4000-10000 /cmm
PLATELETS	305000	263000	150000-410000/cmm
C REACTIVE PROTEIN	14		0-6 mg/L

Table1.0: laboratory investigation

On worsening the symptomatic condition and no changes in the laboratory investigation the patient was kept under high observation. On the physical examination of the 3rd day the patient showed a small erythematous blanching papules on the right shoulder which was then expanding till the wrist region, sparing the palm and planter surface of both hands. A dermatology consultant was taken for the drug reaction over the body. As per the consultant cutaneous examination it some that refer to the atypical pattern rash of the rocky mounted spotted fever (RMSF). Then the WEIL FELIX TEST was ordered and it showed that protease antigen OX19 AND OX2 were reactive with titrate level of 1:40.

On questioning the background of the patient, the patient had no history of any outstate or out-country trip which made unbelievable to accept the RMSF over Gujarat with such a small ratio of the infection.

On the 5th day of admission the patient was discharged with a complete medication course of Cap. DOXYCYCLINE 100 mg EVERY 12 HOURLY and was asked to follow up on the 10th day.

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