



A RARE CASE OF CHIKUNGUNYA COMPLICATED WITH TOXIC EPIDERMAL NECROLYSIS AND POST INFECTIOUS GLOMERULONEPHRITIS

Internal Medicine

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ABSTRACT

Chikungunya viral infection of Alphavirus family spread by Aedes aegypti mosquito, characterized by a sudden onset of fever associated with joint pains. The arthritic symptoms associated with chikungunya can be debilitating and may persist for months or even years in some patients. We reported the case of 27 year old male patient presented with fever with chills and rigor with severe joint pain and whole body rashes since 5 days. Then after admission patient developed bilateral pitting edema, maculopapular rash with blanching and decreased urine output on 3rd day of admission and also skin peeling (TEN) seen on 5th day of admission. Patient started on IV antibiotics and fluids, Hydrocortisone was given for TEN. Patient gradually improved. Chikungunya is a vector borne disease which can rarely present with complications like Toxic Epidermal Necrolysis and Glomerulonephritis but one should keep them in mind while treating the patient.

KEYWORDS

Chikungunya, Toxic Epidermal Necrolysis, Post Infectious Glomerulonephritis

INTRODUCTION

Chikungunya is a viral infection of Alphavirus family spread by Aedes aegypti mosquito with symptoms including fever, joint pain, conjunctivitis, rash etc. Typically occurs 2-12 days after exposure and improved within week but occasionally complicated with long standing arthralgia, neuropathy, meningoencephalitis, GBS, retinitis, myocarditis and nephritis.

CASE REPORT

A 27 year old Hindu male patient presented with fever with chills and rigor with severe joint pain and whole body rashes since 5 days.

There was no any other significant past history or history of similar complaints.

On admission patient vitally stable then gradually developed bilateral pitting pedal edema and maculopapular rash with blanching with decreased urine output with raised blood pressure on 3rd day.

On 5th day patient peeling of skin was seen.

IMAGING WORKUP

INVESTIGATIONS			
Hb	14.5	14.2	13.6
TLC	19400	21800	14000
Platelet	47000	86000	2.1 lac
S.Creatinine	1.7	0.7	0.5
S.Urea	82	52	28
S.Albumin	2.1	2.7	3.1
S.Na	134	141	138
S.K	3.8	4.1	3.9
Urine R/M	Albumin + RBC -	Albumin ++ RBC +	Albumin - RBC -
S.Bilirubin D.	1.1	0.9	
S.Bilirubin T.	1.9	1.7	
SGPT	104	84	
Blood & Urine CS	NAD		
C3 level		0.63	
C4 level		0.24	

Urine RATIO	P/C	1.31
PTH		26.1
TG/HDL/VLDL		246/19/49.2
HHH		Negative
Anti dsDNA		Negative
Dengue IgM		Negative
Chickengunia IgM		Positive
USG/2D ECHO		NAD

Figure 1



Figure 2



Figure 3

TREATMENT

The patient was started on IV Antibiotics, Steroids and fluids with strict input output charting.

As Hydrocortisone was given for TEN. Patient gradually improved. Pedal edema subsided with normal urine output, normal blood pressure and normal renal function test.

On 10th day skin lesions started healing.

Patient was discharged on 12th day with oral antibiotics, tapering dose of steroid and follow up after one week with RFT and urine routine which suggestive of normalized kidney function.



Figure 4

DISCUSSION

Chikungunya is an infection caused by the Chikungunya virus. Symptoms include fever and joint pains. These typically occur two to twelve days after exposure. Symptoms usually improve within a week; and rarely complicate however, occasionally the joint pain may last for months or years.

The virus is spread between people by two types of mosquitos: *Aedes albopictus* and *Aedes aegypti*. Characteristic symptoms include sudden onset, combining high fever, joint pain, and rash.

Chikungunya is diagnosed on the basis of clinical, epidemiological, and laboratory criteria specifically with IgM antibodies in serum. Currently, no specific treatment for chikungunya is available. Supportive care is recommended.

The most effective means of prevention are protection against contact with the disease-carrying mosquitoes and controlling mosquito populations by limiting their habitat. Since no vaccine is available.

CONCLUSION

Chikungunya is a vector borne disease which can rarely present with complications like Toxic Epidermal Necrolysis and Glomerulonephritis but one should keep them in mind while treating the patient. These complications are life threatening but can be managed successfully if diagnosed early.

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