



## ACUTE KIDNEY INJURY SECONDARY TO RHABDOMYOLYSIS – A RARE MANIFESTATION OF CHIKUNGUNYA FEVER

**Dr. Udayagiri  
Sabiha Kausar**

**Dr. Palagiri  
Naseeruddin**

**ABSTRACT** Chikungunya is an acute viral illness usually characterized by Fever with prominent Joint involvement. It is transmitted by *Aedes aegypti* and *albopictus*, a mosquito species widely distributed in Asia, Europe, Africa, and America. Very few cases of Chikungunya leading to Rhabdomyolysis have been reported in an otherwise healthy patient.

### KEYWORDS :

#### MATERIALS AND METHODS

We report a rare case of AKI Secondary to Rhabdomyolysis manifestation of Chikungunya fever.

#### CASE STUDY

A 28 yr. old male presented with high grade fever with chills, myalgias and arthralgias involving small and large joints. It was accompanied by generalized non-pruritic erythematous rash. On 5th day of illness, he had decreased urine output with passage of cola coloured urine. He then became anuric and had dyspnoea at rest for which he got admitted. On General Examination he had normal blood pressure, mild tachycardia and facial puffiness. His thigh and calf muscles were tender. He had fine bilateral end inspiratory basal crepitations and mild splenomegaly on systemic examination. Thus, a diagnosis of chikungunya fever with Rhabdomyolysis with AKI was made. He required multiple sessions of haemodialysis due to anuria and fluid overload. Eventually Renal parameters recovered, and he was discharged with a creatinine of 1.2mg/dl. On follow-up the patient is currently asymptomatic with normal creatinine.

#### INVESTIGATIONS

Creatinine of 5.9 mg/dl, Serum urea - 65mg/dl, SGOT - 1634 U/L, SGPT - 236 U/L, Urine protein - 3+, Blood - 3+, plenty of RBC's and 5-6 WBC. Urine Myoglobin was positive. His CPK was > 1600 IU/L While CKMB was 50 U/L. USG Abdomen demonstrated increased Renal cortical echogenicity with maintained corticomedullary differentiation. His work up for Acute febrile illness namely malaria, dengue, leptospirosis, enteric fever, scrub typhus, blood and urine cultures were negative. His Autoimmune profile (RF, Anti CCP, ANA) was negative. Chikungunya Ig M as well as PCR in blood were positive.

#### DISCUSSION

We present a case of Chikungunya virus infection complicated by Rhabdomyolysis, a rare complication of the infection. Most common presenting features reported are Fever (92%) which varies from low grade to high grade fever and arthralgia (87%). Diagnosis of Chikungunya fever is confirmed using Real-time Reverse transcriptase PCR (RT-PCR) or Chikungunya virus serology. The patient recovered uneventfully with conservative management and was discharged to home.



Patient photograph showing Generalized Non-Pruritic Erythematous rash and Cola coloured Urine.

#### CONCLUSION

Rhabdomyolysis with oliguric AKI is a rare presentation of

Chikungunya infection. A high degree of suspicion for such cases is needed during an outbreak of Chikungunya which necessitates early and aggressive fluid resuscitation.

#### REFERENCES

1. Chikungunya infection in travelers. [Jul;2018]; HocheDez P, Jaureguiberry S, Debruyne M, et al
2. Outbreak of Chikungunya in Johor Bahru, Malaysia: clinical and laboratory features of hospitalized patients. [Jan;2019]; Chew LP, Chua HH.