



## CHIKUNGUNYA WITH RESPIRATORY AND DERMATOLOGICAL INVOLVEMENT: A CASE REPORT

### General Medicine

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### KEYWORDS

#### CASE-

A 60 year old male presented with the complaints of fever since one week which was low grade, daily, with an intermittent nature and would subside with treatment. He also had severe joint pains primarily involving the ankle joints and knee joints which was reported to have an intensity of 9/10 and would persist throughout the day. He complained of on and off breathlessness on exertion since 4 years which aggravated since 4 months which was associated with seasonal variation. It was associated with loss of appetite and loss of weight of approximately 4kgs in 1 month. He had diffuse pigmentation over the face and chest. There was no history of cough, cold, vomiting, nausea, loose stools, rashes, abdominal pain, oliguria, bleeding tendencies. He had a history of Leptospirosis fever 2 weeks prior and was treated for the same with Tab. Doxycycline 100mg BD for 7 days and IV Fluids. He had a history of Pulmonary Tuberculosis 15 years back for which he had taken ATT for 6 months. No known comorbidities. On examination, his vitals were stable and had Bilateral rhonchi all over lung fields with decreased air entry on both lung fields.

#### LABORATORY INVESTIGATIONS-

Investigation	Day1	Day2	Day3	Day4	Day5
Hb	14.9	12.6	11.6	11.1	11
TLC	9.6	9.1	8.9	7.8	7.1
Platelets	202	231	287	245	320
Creatinine	0.9	0.9	1.1	1.2	1.0
S.Na	135	-	136	134	-
S.K	3.1	-	3.4	3.4	-
S.Cl	97	-	97	95	-

**Malarial Parasite-** Negative

**Malarial Antigen Test-** Negative

Dengue NS1, IgM, IgG by ELISA- Negative

Chikungunya IgM- Reactive

ESR 65

HbA1c 6.5%

Sputum Routine & Microscopy- 20-25 pus cells, 6-7 epithelial cells, Gram positive cocci in pairs and chains. On KOH mount- budding yeast cells with pseudohyphae seen.

**Sputum Culture** – Pseudomonas Aeruginosa

Sensitive to Amikacin, Ciprofloxacin, Ceftriaxone, Imipenem, Meropenem, Doripenem, Streptomycin, Ticarcillin, Piperacillin

Chest X-Ray reported as prominent bilateral vascular markings. Right Upper zone fibrosis.

2D Echo reported as LVH, DD. LVEF 55%

Pulmonology opinion was taken and reported as suspected Post Tuberculosis Sequelae. Dermatology opinion was taken and reported as Diffuse reticulate slate coloured pigmentation involving the

centrofacial area which is classical of post chikungunya pigmentation. A Skin biopsy from the affected area was taken. Patient was diagnosed with Chikungunya Fever with Chikungunya pigmentation and Post TB Sequelae. He continued to spike fever until 3 days of admission, the intensity of which however, started to reduce. He was treated with Inj. Azithromycin 500mg OD for 5 days, Inj. Hydrocort 100mg tapered over 5 days, Tab. Doxycycline 100mg BD for 7 days, Tab. Cetrizine 10mg HS for 7 days, Local emollients for pigmentation, Nebulization with Duolin and Budecort TDS for 7 days. He became afebrile and joint pains started to reduce since 4th day of admission. They however, still persisted and patient was discharged on 7th day on oral medications and nebulization at home.

On follow up after 14 days, patient reported to have spiked no fever since discharge. Joint pains had reduced by 60% and chest findings were clearer.

#### DISCUSSION-

Chikungunya is a viral disease transmitted to humans by infected mosquitoes. It causes fever and severe joint pain. Other symptoms include muscle pain, headache, nausea, fatigue and rash. Joint pain is often debilitating and can vary in duration. The disease shares some clinical signs with dengue and zika, and can be misdiagnosed in areas where they are common. The proximity of mosquito breeding sites to human habitation is a significant risk factor for chikungunya.

The disease mostly occurs in Africa, Asia and the Indian subcontinent. However a major outbreak in 2015 affected several countries of the Region of the Americas. Chikungunya is characterized by an abrupt onset of fever frequently accompanied by joint pain. Other common signs and symptoms include muscle pain, headache, nausea, fatigue and rash. The joint pain is often very debilitating, but usually lasts for a few days or may be prolonged to weeks. Hence the virus can cause acute, subacute or chronic disease. Most patients recover fully, but in some cases joint pain may persist for several months, or even years. Occasional cases of eye, neurological and heart complications have been reported, as well as gastrointestinal complaints. Serious complications are not common, but in older people, the disease can contribute to the cause of death. Often symptoms in infected individuals are mild and the infection may go unrecognized, or be misdiagnosed in areas where dengue occurs. Several methods can be used for diagnosis. Serological tests, such as enzyme-linked immunosorbent assays (ELISA), may confirm the presence of IgM and IgG anti-chikungunya antibodies. IgM antibody levels are highest 3 to 5 weeks after the onset of illness and persist for about 2 months. Samples collected during the first week after the onset of symptoms should be tested by both serological and virological methods (RT-PCR). The virus may be isolated from the blood during the first few days of infection. Various reverse transcriptase-polymerase chain reaction (RT-PCR) methods are available but are of variable sensitivity. Some are suited to clinical diagnosis. RT-PCR products from clinical samples may also be used for genotyping of the virus, allowing comparisons with virus samples from various geographical

sources. There is no specific antiviral drug treatment for chikungunya. Treatment is directed primarily at relieving the symptoms, including the joint pain using anti-pyretics, optimal analgesics and fluids. There is no commercial chikungunya vaccine.