

WEEKLY EPIDEMIOLOGICAL REPORT

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01st - 07th Mar 2025

A Family Physician's Perspective of Chikungunya-Like Illness Outbreaks

Introduction

Chikungunya was first reported in Tanzania, Africa, in 1952. Chikungunya is spread by an alphavirus, found mainly in tropical areas, and transmitted by bites of the *Aedes aegypti* and *Aedes albopictus* mosquitoes.

General Practitioners (GPs) in Sri Lanka who provide first-contact care to their patients have mentioned seeing patients with features of Chikungunya-like illnesses in their clinics which I too experienced, but not in large numbers. These patients were devoid of the typical symptoms seen in 2006 in my clinic situated in Colombo 13.

In 2006, during the Chikungunya outbreak, I treated 1,100 cases of Chikungunya-like illnesses with many features mentioned in the literature. I was thus able to record and archive valuable primary data and observations, including signs and symptoms of Chikungunya in those I treated. Later, in this report, I will compare the signs and symptoms of the present outbreak with my 2006 study. The epidemic in 1966 has been documented in the Ceylon Medical Journal.

Given the fact that patients have to pay a fee for service in family practice in Sri Lanka, GPs had been treating many patients during the 2006 epidemic without imposing investigation costs on them, unless there was an absolute need. I too followed the same approach. Thus, the inclusion criteria in my study were merely the clinical picture. It was rather overwhelming to note that, during the 2006 outbreak, common medical problems seen by a GP took a back seat, while almost every patient who came to me was one with this illness. Most of my patients were from Kotahena, Mutuwal, Crow Island, Grandpass and Maradana.

Clinical Features:

a) Features described in the 1966 study and also seen in my patients in 2006

- Fever of up to 39°C (102.2°F), flushed painful-looking facies and conjunctival injection were seen in many patients. The flushed nature was seen in the pinna. It seemed to be pathognomonic of Chikungunya during the height of this epidemic and was almost universal in the 1966 series.
- 2) A petechial or maculopapular rash in some, typically affecting the limbs and trunk, and arthralgia or arthritis that impacts multiple joints, in many. Additionally, myalgia associated with the condition may be debilitating. Headache and a slight photophobia with conjunctival injection were also present.
- 3) Frequent complaints of loss of appetite, lack of taste, sore throat/mild dry cough.

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Figure 1. Clinical presentation of lower limb symptoms in patients with Chikungunya. Source: Archived records from Dr. K. Chandrasekher's Family Practice.

- 1. A Family Physician's Perspective of Chikungunya-Like Illness Outbreaks
- 2. Summary of selected notifiable diseases reported (22nd 28th Feb 2025)
- 3. Surveillance of vaccine preventable diseases & AFP (22nd 28th Feb 2025)

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b) Features seen in the 1966 study, but not seen in my patients in 2006

- 1. No marked bradycardia in my patients. Hypotension was common, with many feelings of fainting or giddy during micturition or defecation possibly due to dehydration associated with fever.
- 2. Lymphadenopathy was not routinely observed. Many had posterior cervical and post-auricular lymphadenopathy which was tender and more on the left. This was also articulated by the patients.
- 3. Mental and neurological symptoms were uncommon. However, some reported experiencing difficulty sleeping for two to three days after their fever subsided, despite not being on any medication.
- 4. Haemorrhagic features and haematological symptoms were not observed.

c) Features not seen in the 1966 study, but seen in my patients in 2006

- 1. Pruritus of the body in many, on the third or fourth day of the fever
- 2. At least four patients had a tender 2-3 cm linear wormlike thickening under the skin in the shin or calf region. It was not clear whether this was a lymphangitis, vasculitis or a thrombophlebitis.
- 3. A few cases of crural ulcers and aphthous ulcers were noticed.

Investigations:

No investigations were done except on those where the fever was of a saddle type. The WBC/DC tests indicated mild leucopenia, and in two cases, the platelet counts were between 105,000 and 120,000/cmm. Since both patients could afford it, Dengue antibody tests were conducted, and they tested positive for IgG and IgM. Their platelet counts were monitored every other day. By the third report, both reached 160,000 to 180,000/cmm. Serological assays for Chikungunya -specific IgG and IgM antibodies, Neutralization Tests, and Polymerase Chain Reactions Tests were not conducted by me.

Treatment:

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There is no specific treatment for Chikungunya. After ensuring there were no contraindications, the following symptomatic treatment was provided.

- 1. Bed rest until they are free of temperature and feel better.
- 2. Oral hydration of at least 1.0 1.5 litres for adults and provision of packets of Jeevani with instructions on preparation and administration.
- 3. Analgesia: Treating patients with severe pain/high fever with Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) was common then, as the incidence of Dengue fever was low. It is imperative that treatment schedules for the same illness will have to be adapted in the context of other diseases that are prevalent in the community.
- 4. The use of Chloroquine for non-refractory arthralgia although spoken of in the literature is better avoided now, due to a lack of expert consensus on its use and given the re-emergence of malaria in Sri Lanka.

In the present 2025 episode most patients present with mild to moderate fever, myalgia and joint pains with swelling of one or two joints in just a few patients. I treat them with Paracetamol, advise complete bed rest and good hydration, and follow them up. If the pain is severe in the follow-up visit, on a caseby-case basis, I do a rapid antigen test to exclude Dengue before prescribing NSAIDs and a short course of steroids like prednisolone after careful consideration of other medical conditions in the patient.

Patients were advised to limit further exposure to mosquito bites, wear fully-covering clothes, stay indoors, and use a mosquito net. In the non-acute phase when the arthralgia was persistent, they were advised on movement and non-weightbearing exercises to improve stiffness and morning arthralgia while cautioning against heavy exercise that could exacerbate joint symptoms.

Concluding Remarks:

I would like to emphasise that all patients who came to me this time with fever myalgia and/or arthralgia were asked whether they had an attack of Chikungunya in 2006. All of them without exception, over the age of 20 years, answered in the affirmative. This raises the following interesting questions in the context of the present episode:

- Is it possible that those who were affected in 2006 have developed long-term immunity to this disease?
- Is a different strain of the virus now causing Chikungunya?
- Is the current episode in the initial stages of an epidemic yet to come?

From a public health perspective, these are questions that need to be addressed, with empirical evidence and investigations, in partnership with public health agencies and General Practitioners.

Compiled by: Dr. K. Chandrasekher (Family Physician) MBBS. DFM. PG Dip. M.Ed. FCGP

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ved on or before 28th Feb, 2025 Total number of reporting units 361 Number of reporting units data provided for the current week: 358 C**-COmpleteness +

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	Ampara	4	42	2	5	0	~	0	0	0	~	5	39
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ge 3	Source: Weekly Returns of Communicable Diseases (esurvillance.epid.gov.lk). T=Timeliness refers to returns received on or A = Cases reported during the current week. B = Cumulative cases for the year.	Returns during the	of Commur current week	iicable B = Cun	Diseases nulative case	(esurvill es for the	lance.epi year.	id.gov.lk	(). T =Tir	neliness	refers to r	returns re	ceived on o

Table 2: Vaccine-Preventable Diseases & AFP

01st-07th Mar 2025

22^{nd -} 28th Feb 2025 (08th Week)

Disease	No.	of Ca	ases	by P	rovir	ice				Number of cases during current	Number of cases during same	Total number of cases to date in	Total num- ber of cases to date in	Difference between the number of cases to date	
	W	С	S	Ν	Е	NW	NC	U	Sab	week in 2025	week in 2024	2025	2024	in 2025 & 2024	
AFP*	00	00	01	00	00	00	00	00	00	01	00	12	12	0%	
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Mumps	02	00	00	00	00	02	00	01	00	05	06	43	53	-18.8 %	
Measles	00	00	00	00	00	00	00	00	00	00	07	01	141	-99.2%	
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	01	-100%	
CRS**	00	00	00	00	00	00	00	00	00	00	00	01	00	0 %	
Tetanus	00	00	00	00	00	01	00	00	00	01	00	02	00	0 %	
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %	
Japanese Enceph- alitis	00	00	00	00	00	00	00	00	00	00	00	04	01	300 %	
Whooping Cough	00	00	00	00	01	00	00	00	00	01	00	06	01	500 %	

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.

RDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS, Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS** =Congenital Rubella Syndrome

NA = Not Available

Take prophylaxis medications for leptospirosis during the paddy cultivation and harvesting seasons.

It is provided free by the MOH office / Public Health Inspectors.

Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication

ON STATE SERVICE

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