



WEEKLY EPIDEMIOLOGICAL REPORT

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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 is transmitted by mosquito bites from the *Aedes Aegypti* mosquito and *Aedes Albopictus*.

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

- 1) 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.



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

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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 worm-like 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:

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 case-by-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-weight-bearing 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:

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Table 1: Selected notifiable diseases reported by Medical Officers of Health 22nd–28th Feb 2025 (09th Week)

RDHS	Dengue Fever		Dysentery		Encephalitis		En. Fever		F. Poisoning		Leptospirosis		Typhus F.		Viral Hep.		H. Rabies		Chickenpox		Meningitis		Leishmania-		Tuberculosis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	219	2131	0	4	0	3	0	0	1	5	5	89	0	3	0	3	0	0	15	104	1	13	0	1	60	351	100	100
Gampaha	119	1421	3	11	1	12	0	1	0	39	19	153	0	2	2	4	0	0	22	163	3	28	0	8	16	196	100	100
Kalutara	31	342	0	8	0	1	1	2	0	12	14	136	0	0	0	2	0	0	12	113	2	9	0	0	15	121	92	75
Kandy	58	608	0	15	0	2	0	1	0	6	1	68	0	18	1	5	0	0	9	82	1	6	0	11	14	156	100	100
Matale	28	346	0	7	0	1	0	0	0	5	3	43	0	1	0	4	0	0	2	16	0	1	1	37	3	26	100	100
Nuwara Eliya	2	47	7	21	1	3	1	3	0	44	1	32	0	15	0	0	0	0	8	49	0	6	0	0	4	58	100	100
Galle	21	430	0	16	0	2	0	0	0	17	24	161	0	24	3	4	0	0	25	154	2	31	0	0	12	93	100	100
Hambantota	12	199	0	5	0	2	0	0	1	3	6	83	2	11	0	1	0	0	17	82	0	2	5	57	0	36	100	100
Matara	24	320	0	4	0	2	0	0	0	3	12	107	0	6	0	2	0	0	10	68	0	13	0	21	3	40	100	100
Jaffna	28	379	1	18	0	1	0	3	0	10	1	105	26	186	0	0	0	1	9	52	2	7	0	0	3	35	93	93
Kilinochchi	1	30	0	4	0	0	0	2	0	1	2	30	3	8	0	1	0	0	1	1	0	0	0	0	0	7	100	100
Mannar	3	73	0	0	0	0	0	0	0	0	0	8	1	3	0	0	0	0	0	4	0	7	0	0	2	7	100	100
Vavuniya	5	22	0	4	0	0	0	0	0	1	3	27	0	2	0	0	0	0	3	6	2	5	0	5	0	6	75	100
Mullaitivu	1	20	0	1	0	0	0	1	0	0	1	31	0	2	0	0	0	0	1	6	0	2	0	0	0	5	100	100
Batticaloa	59	577	1	52	0	6	0	0	0	5	0	19	0	1	0	7	0	0	5	60	1	12	0	1	6	28	14	100
Ampara	4	42	2	5	0	1	0	0	0	1	5	39	0	1	0	1	0	0	6	23	0	2	1	6	2	12	100	100
Trincomalee	25	257	0	18	0	1	0	0	1	14	3	44	0	5	0	1	0	0	2	28	0	7	0	3	0	19	25	100
Kurunegala	25	244	0	6	0	4	0	1	0	18	16	193	0	14	0	1	0	0	25	170	3	30	6	110	12	74	100	100
Puttalam	23	210	0	4	0	0	0	0	0	4	4	94	2	13	0	1	0	0	3	38	4	23	0	5	5	44	100	100
Anuradhapura	18	204	1	9	0	5	1	1	0	7	8	138	0	9	0	4	0	0	9	61	0	21	2	164	7	53	83	100
Polonnaruwa	6	56	0	7	0	1	0	0	0	1	5	53	0	0	0	7	0	0	3	38	0	1	17	75	1	11	100	93
Badulla	11	178	1	3	0	1	0	0	0	0	4	77	3	8	0	9	0	0	13	90	1	19	0	3	5	44	100	100
Monaragala	10	177	0	5	1	2	0	0	1	3	10	126	1	17	0	2	0	0	2	25	0	15	5	24	3	23	91	100
Ratnapura	47	479	3	22	1	3	0	3	4	11	24	328	1	9	0	2	0	0	16	93	3	31	23	32	11	80	100	100
Kegalle	22	280	1	19	0	3	0	0	0	12	14	146	2	4	1	5	0	0	21	168	3	13	0	11	3	52	100	100
Kalmunai	7	112	1	6	0	0	0	0	0	6	3	29	0	0	0	1	0	0	0	41	0	4	0	0	5	23	15	100
SRILANKA	809	9184	21	274	4	56	3	18	8	228	188	2359	41	362	7	67	0	1	239	1735	28	308	60	574	192	1600	88	99

Source: Weekly Returns of Communicable Diseases (esurveillance.avid.gov.lk). T=Timeliness refers to returns received 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
A = Cases reported during the current week. B = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

22nd – 28th Feb 2025 (08th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2025	Number of cases during same week in 2024	Total number of cases to date in 2025	Total number of cases to date in 2024	Difference between the number of cases to date in 2025 & 2024
	W	C	S	N	E	NW	NC	U	Sab					
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 Encephalitis	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.

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