WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health, Nutrition & Indigenous Medicine

231, de Saram Place, Colombo 01000, Sri Lanka
Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@sltnet.lk
Epidemiologist: +94 11 2681548, E mail: chepid@sltnet.lk
Web: http://www.epid.gov.lk

WER SRI LANKA 2019

Vol. 46 No. 19 04th – 10th May 2019

Monkeypox—Part I

Human Monkeypox (MPX)

This is the first of a series of articles on Human Monkeypox

Asian countries are found as free from monkeypox, until the first case was found from Singapore on 9 May 2019, the case was a 38-year-old Nigerian male who arrived in Singapore on 28 April 2019 and attended a workshop from 29-30 April. This is the first diagnosed case of monkeypox infection in Singapore. As a country of the Asian region, Sri Lankan should know this infectious diseases as other disease for control and prevention.

What is monkeypox?

Monkeypox is a viral infectious disease and it was identified in human in a 9 year old boy in the Democratic Republic of Congo (Zaire) in year 1970. Monkeypox (MPXV) is a member of the Orthopoxvirus genus in the family Poxviridae. Monkeypox is a rare viral zoonosis. It is a zoonotic disease and transmits from animal to human. This virus is an orthopoxvirus that causes a viral disease with symptoms in humans similar, but milder, to those seen in smallpox patients. At that time the case arose in Congo, where smallpox had been eliminated in 1968. Smallpox is not an infectious disease in the world anymore. It was declared eradicated in the world in 1980. Monkeypox occurs sporadically in central and western parts of Africa's tropical rainforest region.

How a person gets infected?

Human transmission occurs with following situations; direct contact with the blood, body fluids, or cutaneous or mucosal lesions of infected animals (specially handling with infected monkeys), eating inadequately cooked meat of infected animals, close contacts such as infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials.

Gambian giant rats, squirrels, with rodents are the most likely reservoir of the virus. Though the monkeypox virus is mostly transmitted to people from various wild animals such as rodents and primates, it has limited secondary spread through human-to-human transmission. Congenital monkey-

Contents

pox can occur, with transmissions occurred by inoculation or via the placenta. There is no evidence to date that person-to-person transmission alone can sustain monkeypox in the human population.

What are the clinical signs and symptoms of this infection?

Interval from infection to onset of symptoms (incubation period) is usually from 6 to 16 days of monkeypox, but can range from 5 to 21 days. Signs and symptoms arise following two infectious periods. It is the invasive period and skin eruption period. Invasive period takes 0-5 days. In this period following signs and symptoms can develop; fever, intense headache, lymphadenopathy (swelling of the lymph node), back pain, myalgia (muscle ache) and an intense asthenia (lack of energy).

Skin eruption period takes 1-3 days after the onset of fever. Various stages of rash appear in this period. It begins on the face and spreads along other parts of the body. Mostly attacked place for rashes of human body is the face of affected cases (95%), while palms of the hands and soles of the feet of cases are affected (75%). This rash starts as maculopapules and then becomes vesicles and pustules followed by crusts within 10 days. Disappearance of crusts may occur within three weeks time.

Mucosal lesions can occur in various cases such as oral mucous membranes (in 70% of cases), genitalia (30%), and conjunctivae (eyelid) (20%). Some cases present with affecting cornea of the eye ball. The number of the lesions varies from a few to several thousand.

It is a noticeable feature of severe lymphadenopathy (swollen lymph nodes) before the appearance of the rash, which is a distinctive feature of Monkeypox compared to other similar diseases. Complications can occur in children and adults in debilitated immune status of the body. But, monkeypox is usually a self-limited disease with the symptoms lasting from 14 to 21 days. Documentary evidence shows that case fatality rate of monkeypox is less than 10% and most susceptible are younger age groups.

How do we diagnose monkeypox?

Other rashes of infectious diseases are considered as differential diagnosis of monkeypox, such as chickenpox, measles, bacterial skin infections, scabies, syphilis, and medication-associated allergies. Lymphadenopathy during the prodromal stage of illness can be a clinical feature to distinguish monkeypox from smallpox which remains eradicated today. Laboratory confirmation of the virus can be done by using optimal samples of lesions. These are vesicular swabs of lesion exudates or crusts which are stored in a dry, sterile tube (no viral transport media) and kept cold until dispatch to the laboratory.

What is the treatment?

There is no specific treatment or vaccine available for monkeypox. It has been identified that prior smallpox vaccination was highly effective in preventing monkeypox as well. Vaccination against smallpox has been proven to be 85% effective in preventing monkeypox in the past but the vaccine is no longer available to the general public after it was discontinued following global eradication of smallpox.

Compiled By :

Dr Hathshya M Munasingha.

Consultant Epidemiologist

Epidemiology Unit

Ministry of Health.

to be continued ...

Table 1: Selected notifiable diseases reported by Medical Officers of Health 27th – 03rd May 2019 (18th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmania-sis		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	T*	C**
Colombo	168	3579	3	17	1	3	0	5	0	22	9	70	0	7	0	4	0	0	11	195	2	22	0	2	**48**	**100**
Gampaha	100	2178	0	8	0	1	0	3	0	15	1	42	0	2	0	1	0	1	13	156	1	10	0	34	**54**	**95**
Kalutara	52	1046	1	30	1	4	0	6	0	28	7	205	0	3	0	2	0	0	13	290	3	49	0	3	**60**	**96**
Kandy	63	1003	3	27	0	5	0	1	0	9	2	28	2	34	0	2	0	1	5	104	2	23	1	13	**63**	**100**
Matale	8	199	0	11	0	2	0	0	0	1	1	23	0	4	0	3	0	1	3	37	0	3	1	103	**54**	**100**
NuwaraEliya	3	65	9	29	0	1	0	2	0	0	0	13	1	30	0	4	0	0	2	29	1	18	0	0	**25**	**100**
Galle	43	582	0	26	0	4	0	2	0	1	5	122	0	18	1	4	0	0	9	181	3	29	0	2	**63**	**97**
Hambantota	23	415	0	3	0	0	0	0	0	5	4	41	3	62	0	1	0	0	10	153	0	15	18	286	**72**	**100**
Matara	31	590	0	4	0	4	0	1	0	3	7	106	0	15	1	10	0	0	2	126	0	4	10	218	**59**	**100**
Jaffna	20	1803	1	63	0	5	3	11	0	11	0	21	2	252	0	2	0	0	3	122	1	7	0	0	**23**	**93**
Kilinochchi	1	84	1	8	0	1	0	9	0	0	1	17	1	21	0	1	0	0	0	3	1	3	0	7	**46**	**97**
Mannar	2	67	0	2	0	1	0	7	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0	1	**47**	**92**
Vavuniya	3	161	0	6	1	5	0	15	0	3	0	36	0	4	0	0	0	0	1	42	0	8	0	1	**53**	**100**
Mullaitivu	1	88	0	6	0	0	0	4	0	1	0	11	0	6	0	0	0	0	0	0	0	2	1	2	**37**	**70**
Batticaloa	21	742	1	43	0	0	0	10	1	3	1	18	0	1	0	0	0	1	11	104	2	7	0	0	**54**	**98**
Ampara	2	94	0	11	1	2	0	0	0	4	0	16	0	1	1	7	0	0	5	68	1	5	0	4	**55**	**100**
Trincomalee	10	503	2	7	0	0	0	0	4	8	0	3	0	3	0	1	0	0	1	88	0	4	0	1	**37**	**81**
Kurunegala	20	649	2	25	1	6	0	4	2	8	4	83	0	10	0	13	0	0	11	296	3	29	19	335	**57**	**99**
Puttalam	7	227	2	14	0	2	0	1	0	1	1	14	0	8	0	1	0	0	2	82	1	18	0	5	**62**	**100**
Anuradhapura	8	207	1	11	0	5	0	3	0	2	0	76	1	23	1	13	0	1	12	252	1	41	12	215	**42**	**96**
Polonnaruwa	5	109	0	7	0	2	0	1	0	0	0	33	0	3	1	12	0	0	10	149	0	11	5	93	**59**	**99**
Badulla	7	272	3	23	0	2	0	4	0	55	2	81	1	46	0	11	0	0	6	105	7	75	1	10	**64**	**100**
Monaragala	8	194	2	26	0	3	0	0	0	73	5	133	2	51	1	32	0	0	10	127	2	66	0	9	**62**	**100**
Ratnapura	30	758	1	38	2	21	0	6	0	10	11	261	3	18	0	10	0	3	5	174	5	66	6	62	**43**	**99**
Kegalle	23	470	0	16	0	11	0	0	0	20	2	61	0	20	0	66	0	0	14	212	0	13	2	15	**64**	**100**
Kalmune	16	420	1	21	0	0	0	1	0	3	1	19	1	2	0	1	0	0	9	99	2	11	0	0	**63**	**99**
SRILANKA	**675**	**16505**	**33**	**482**	**7**	**90**	**3**	**96**	**7**	**287**	**64**	**1533**	**17**	**650**	**6**	**201**	**0**	**8**	**168**	**3194**	**38**	**539**	**76**	**1421**	**54**	**97**

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 03rd May , 2019 Total number of reporting units 353 Number of reporting units data provided for the current week: 318 C**-Completeness

A = Cases reported during the current week. **B** = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

27th – 03rd May 2019 (18th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2019	Number of cases during same week in 2018	Total number of cases to date in 2019	Total number of cases to date in 2018	Difference between the number of cases to date in 2019 & 2018
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	00	00	00	00	00	00	00	01	02	32	20	60 %
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	02	01	00	00	01	03	00	01	00	08	07	135	138	- 2.1 %
Measles	00	03	00	00	00	00	03	01	00	07	01	81	48	68.7 %
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	04	0 %
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Tetanus	00	00	00	00	00	00	00	00	00	00	01	06	10	- 40 %
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	01	08	14	- 42.8%
Whooping Cough	00	00	00	00	00	00	00	00	01	01	00	27	15	80 %
Tuberculosis	52	31	07	15	02	06	12	16	09	150	55	2835	2576	10.1 %

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

Dengue Prevention and Control Health Messages

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them free of water collection.

PRINTING OF THIS PUBLICATION IS FUNDED BY THE WORLD HEALTH ORGANIZATION (WHO).

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

Dr. SAMITHA GINIGE
DEPUTY EPIDEMIOLOGIST
EPIDEMIOLOGY UNIT
231, DE SARAM PLACE
COLOMBO 10