



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit

Ministry of Health & Indigenous Medical Services

231, de Saram Place, Colombo 01000, Sri Lanka

Tele: + 94 11 2695112, Fax: +94 11 2696583, E mail: epidunit@slt.net.lk

Epidemiologist: +94 11 2681548, E mail: chepid@slt.net.lk

Web: <http://www.epid.gov.lk>

Vol. 47 No. 35

22nd– 28th Aug 2020

Neglected Tropical Diseases - Mycetoma, chromoblastomycosis and other deep mycosis

Mycetoma is a chronic, progressively destructive morbid inflammatory disease, which usually occurs in the foot but can also affect any part of the body. Infection is acquired by traumatic inoculation of the fungi or bacteria into the subcutaneous tissue. It was initially called Madura foot. Mycetoma commonly affects young adults, mostly males between the ages 20 to 40 years, mostly in developing countries. People of low socioeconomic status and manual workers such as those involved in agriculture work, labourers and herdsmen are the worst affected.

Mycetoma is characterized by a triad of: i) painless subcutaneous mass, ii) multiple sinuses and iii) discharge containing grains. It will involve the skin, deep structures and bone resulting in destruction, deformity and loss of function. Mycetoma usually involves the extremities, back and gluteal region.



Figure- Mycetoma lesions

The disease progresses slowly and because the initial lesion is small, many patients present late in the stage of advanced infection. At such times, amputation may be the only treatment. Secondary bacterial infection is common, and lesions may cause increased pain and disability and complicate with fatal septicaemia. Infection

is not transmitted from human to human.

Diagnosis is usually clinically or with surgical biopsy of specimens. PCR testing is also available. Imaging may be used to find extent of disease. Treatment is with antifungals and antibiotic for secondary bacterial infection. Surgical management with amputation is done at times. Prevention is by health education, early diagnosis and treatment to prevent complications.

Onchocerciasis, commonly known as “river blindness”

Onchocerciasis is caused by the parasitic worm *Onchocerca volvulus* which is transmitted to humans through exposure to repeated bites of infected blackflies of the genus *Simulium*. These blackflies breed along fast-flowing bodies of water such as rivers and streams, near remote agricultural villages. When a female blackfly bites an infected person during a blood meal, it also ingests microfilariae which develop further in the blackfly and are then transmitted to the next human host during subsequent bites. The adult worms produce embryonic larvae (microfilariae) that migrate to the skin, eyes and other organs inside the human body.

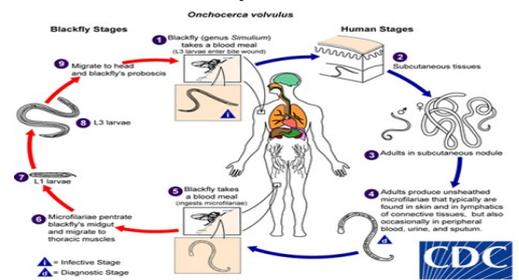


Figure: Lifecycle of *Onchocerca volvulus* Source: Center for Disease Control

WEEKLY SRI LANKA 2020

Contents	Page
1. Leading Article – Neglected Tropical Diseases - Mycetoma, chromoblastomycosis and other deep mycosis	1
2. Summary of selected notifiable diseases reported (15 th – 21 st August 2020)	3
3. Surveillance of vaccine preventable diseases & AFP (15 th – 21 st August 2020)	4

The disease usually affects skin and eyes often leading to disfiguring and itchy lesions and visual impairment, ultimately resulting in blindness. Diagnosis is by skin biopsy and slit lamp examination of the eyes. Treatment is with ivermectin. Prevention mainly relies on vector control and large-scale administration of ivermectin.

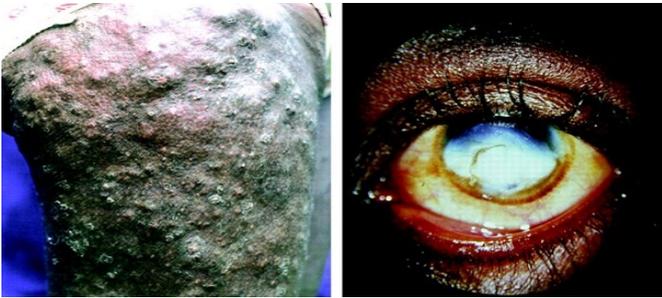


Figure: dermatologic and ophthalmic lesions of Onchocerciasis

Rabies

It is a vaccine preventable zoonotic viral disease which is usually spread to humans via domestic animals, commonly dogs, and certain wild animals following bites, scratches or contact with mucous membranes. Incubation period can range from 1 week to even one year depending on host site of entry and viral load.

There are 2 forms of the disease:

Furious rabies – which results in signs of hyperactivity, excitable behaviour, hydrophobia (fear of water) and sometimes aerophobia (fear of drafts or of fresh air). Death occurs due to cardio-respiratory arrest after a few days.

Paralytic rabies – which has a longer course. Muscles become paralyzed gradually, starting at the site of the bite or scratch. A coma slowly develops, and eventually death occurs.

No definitive treatment is available. Post exposure prophylaxis is given when suspected exposures are reported. Pre-exposure prophylaxis is done in certain occupations. Prevention includes vaccination of dogs, dog population control, pre and post exposure prophylaxis, health education and wound care.

Scabies and other ectoparasites

Human scabies is a parasitic infestation caused by a species of mite known as *Sarcoptes scabiei var hominis*. The mite burrows into the skin and lays eggs, eventually triggering a host immune response that leads to intense itching and rash. Scabies could be complicated with bacterial infection leading to septicemia, heart disease and chronic renal disease.

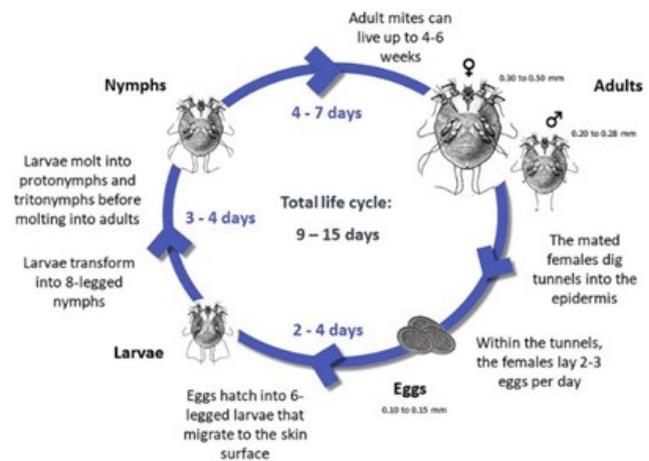
Scabies is usually transmitted person-to-person through close

skin contact an infested individual. The risk of transmission increases with the level of infestations, with highest risk due to contact with individuals with crusted scabies. Transmission due to contact with infested personal items (e.g. clothes and bed linens) is unlikely with common scabies, but may be important for individuals with crusted scabies. Diagnosis is usually clinically or by examining skin scrapings under the microscope.

Primary treatment is with topical permethrin, malathion, ivermectin, benzyl benzoate and sulphur. Sometimes oral ivermectin is given. Secondary management is with treatment of secondary bacterial infections. Education of mode of transmission and maintaining good hygienic practices is needed. Prevention includes proper hygienic practices, household treatment, early diagnosis and treatment.



Figure: Scabies



Lifecycle of *Sarcoptes scabiei var hominis*

Compiled By

Dr. Chathurika Herath,
PG Trainee in Community Medicine,
Epidemiology Unit, Ministry of Health

References:

World Health Organisation: Fact sheets on NTDs
<https://www.who.int/news-room/fact-sheets/detail/mycetoma>
<https://www.cdc.gov/parasites/onchocerciasis/treatment.html>
<https://www.who.int/news-room/fact-sheets/detail/rabies>
https://www.who.int/neglected_diseases/diseases/scabies-and-other-ectoparasites/en/#:~:text=The%20Disease,to%20Intense%20itching%20and%20rash

Table 1: Selected notifiable diseases reported by Medical Officers of Health 15th- 21st Aug 2020 (34th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis		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	52	3692	3	25	0	9	1	6	2	16	5	241	0	2	0	3	0	0	3	189	2	37	0	2	56	100
Gampaha	62	2258	2	10	1	6	1	7	0	19	4	189	1	5	0	6	0	1	3	231	2	26	2	50	41	98
Kalutara	28	1570	1	11	1	6	1	5	0	4	14	516	0	13	0	6	1	1	4	260	3	36	0	0	51	97
Kandy	98	2693	0	23	0	1	0	9	0	13	6	174	2	85	0	4	0	0	0	142	1	23	0	55	64	100
Matale	5	534	1	8	0	3	0	5	0	6	3	90	0	6	0	7	0	1	3	52	1	5	8	240	63	100
NuwaraEliya	3	156	4	30	0	1	0	3	0	9	5	98	7	77	0	3	0	0	0	69	0	12	0	0	23	100
Galle	10	1523	1	30	1	18	0	4	0	14	12	534	1	51	0	3	0	0	3	284	2	48	0	4	31	99
Hambantota	5	330	0	7	0	4	0	2	1	48	7	185	4	55	0	4	0	1	1	160	2	41	3	517	69	100
Matara	5	476	1	23	0	15	0	1	0	3	14	403	0	10	2	9	0	0	1	118	3	20	9	304	16	100
Jaffna	9	1984	2	77	0	0	0	20	4	27	0	20	2	501	0	0	0	1	2	97	1	10	0	2	30	93
Kilinochchi	1	125	0	37	0	2	0	11	1	14	0	18	3	32	0	1	0	0	0	12	1	11	0	13	64	100
Mannar	0	133	0	0	0	0	0	1	0	2	0	6	0	2	0	0	0	0	0	2	0	8	0	0	39	100
Vavuniya	0	248	0	11	0	0	0	5	0	3	0	40	1	2	0	0	0	0	0	29	0	4	0	1	64	100
Mullaitivu	1	81	0	9	0	0	0	6	0	2	0	20	0	10	0	3	0	2	1	10	0	5	0	6	42	93
Batticaloa	9	2306	2	69	0	4	0	1	1	47	0	27	0	0	0	5	0	1	1	84	6	24	0	1	52	100
Ampara	1	306	0	16	0	4	0	0	0	0	1	84	0	0	2	4	0	0	5	110	0	15	0	5	67	100
Trincomalee	1	2269	2	14	0	0	0	0	0	2	0	28	0	9	0	0	0	0	1	84	0	8	1	1	45	91
Kurunegala	24	848	0	21	1	11	0	3	0	36	7	172	1	26	0	5	0	3	3	290	1	30	16	340	47	99
Puttalam	8	445	0	9	0	4	0	3	0	1	1	56	0	15	0	0	0	1	0	72	0	43	0	9	58	100
Anuradhapur	2	390	0	16	1	2	0	4	1	30	2	225	0	20	0	12	0	1	1	166	3	48	7	187	41	96
Polonnaruwa	0	223	0	5	0	0	0	0	0	5	0	117	0	1	0	17	0	1	5	123	0	14	2	189	61	88
Badulla	3	433	1	16	0	5	0	3	0	4	14	286	5	81	0	13	0	0	3	130	2	32	1	18	59	92
Monaragala	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ratnapura	30	1738	3	76	0	26	0	5	0	34	25	1197	1	39	0	15	0	0	4	161	2	90	0	99	50	100
Kegalle	12	694	0	18	2	10	0	3	0	17	13	370	0	39	0	9	0	0	3	147	2	51	1	28	54	100
Kalmune	4	882	0	48	0	3	0	1	0	6	1	17	0	2	0	3	0	0	0	268	1	36	0	0	68	100
SRILANKA	373	26337	23	609	7	134	3	108	10	362	13	5113	28	1083	4	132	1	14	47	3290	35	677	50	2071	49	95

Source: Weekly Returns of Communicable Diseases (WRCD).
 *T=Timeliness refers to returns received on or before 21st Aug, 2020 Total number of reporting units 356 Number of reporting units data provided for the current week: 317 C**=Completeness

Table 2: Vaccine-Preventable Diseases & AFP

15th– 21st Aug 2020 (34th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2020	Number of cases during same week in 2019	Total number of cases to date in 2020	Total number of cases to date in 2019	Difference between the number of cases to date in 2020 & 2019
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	01	00	02	00	00	00	00	00	00	03	03	29	53	- 45.2 %
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	01	00	01	00	01	00	00	00	00	03	05	122	237	- 48.5 %
Measles	01	00	00	00	00	00	00	00	00	01	05	37	230	- 83.9 %
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	00	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	00	03	14	- 76.9 %
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	31	10	210 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	00	05	36	- 86.1 %
Tuberculosis	58	15	12	03	11	12	04	11	14	140	189	4024	5534	- 0 %

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.

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@sitnet.lk. **Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

Dr. Sudath Samaraweera
 CHIEF EPIDEMIOLOGIST
 EPIDEMIOLOGY UNIT
 231, DE SARAM PLACE
 COLOMBO 10