HOMOEOPATHY IN FILARIASIS

KEYWORDS:

Microfilarie, Lymphoedema, Lymphangitis, Elephantiasis, Tropical, Eosiophilia, W.Bancrofti, Chyluria, Homoeopathic Medicament, D.E.C.

Introduction:

Filariasis is a group of parasitic infections. They are nematodes dwell in the subcutaneous tissues and the lymphatics. They share similar life cycle but differ in their vectors.

- the final dwelling place of the adult worms.
- the circadian periodicity of the microfilarae.
- the pathological syndromes they cause (1)

There are eight filarial species infects humans. They are as follows:

Magnitude of the problem.

Filariasis is a global problem. It is found in tropics and subtropics of Africa, Asia, Western Pacific and parts of America, affecting over 120 million people in 73 countries. More than 1.1 billion people live in areas where there is risk of infection (3)

It is estimated that about 600 million people are living in areas of endemic for lymphatic Filariasis in SEAR. There are about 60 million people infected in the region and about 31 million people have clinical manifestation of the disease (4).

In India 420 million people are living in Zones where lymphatic Filariasis is endemic of which 109 million are living in urban area and rest in rural areas.(5). There are about 6 million attacks of acute Filarial disease per year and at least 45 million persons currently have one or more chronic Filarial lesion (6).

As per our D.H.S. Govt. of Orissa 1999 report m.f. rate is 1.51. Disease rate 10.34 and endemicity rate is 11.85 (7).

Filariasis produce a spectrum of illness ranging from

1. Asymptomatic form - with circulating microfilariae.
2. Acute form - Lymphatic inflammation with streaky tender lymphangitis and tender lymph nodes.
3. Chronic form - Lymphatic obstruction leading to Lymphoedema, hydrocele, elephantiasis of the limbs and episodic adenolymphangitis with filarial fever.
4. Cryptic form - Causing lymphatic and renal pathology and tropical eosiophilia (TPE) (8)

Table-I

Characteristics of the filaria

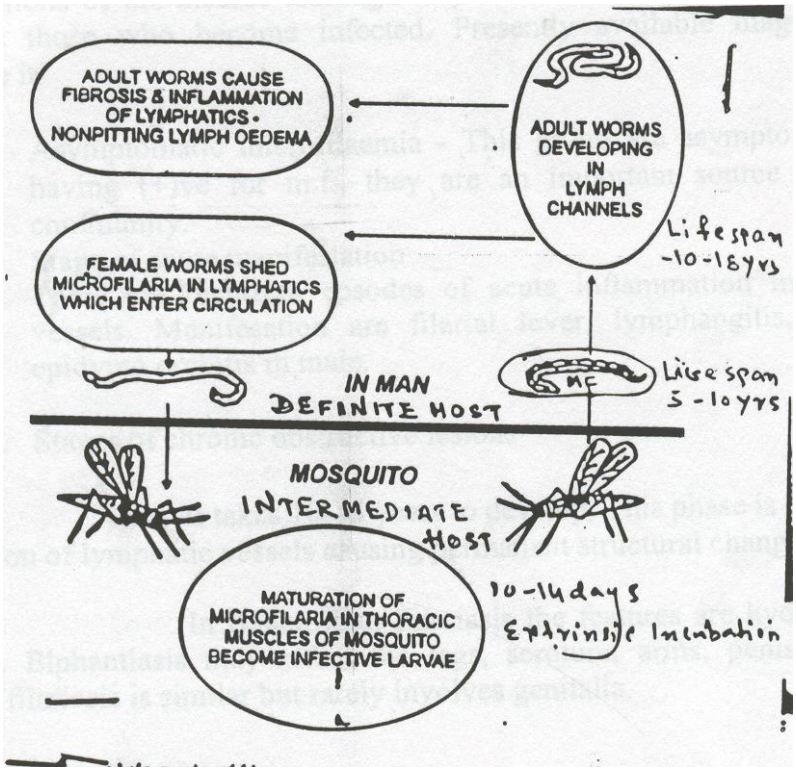
					Microfilaria	
Organism	Periodicity	Distribution	Vector	Location of Adult	Location	Sheath
	Nocturnal	Cosmopolitan areas world wide	Culex (mosquitoes)	Lymphatic tissue	Blood	(+ve)
		Including South America & Africa				
		Mainly India	Anopheles (mosquitoes)			
		China, Indonesia	Aedes (mosquitoes)			
	Sub-peroidic	Eastern pacicific	Aedes (mosquitoes)	Lymphatic tissue	Blood	(+ve)
B.malayi	Nocturnal	Southeast Asia, Indonesia	Mansonia, Anopheles (mosquitoes)	Lymphatic tissue	Blood	(+ve)
		India				
	Sub-peroidic	Indonesia, Southeast Asia	Coquilletidia, Mansonia (mosquitoes)	Lymphatic tissue	Blood	(+ve)
B.timori	Nocturnal	Indonesia	Anopheles (mosquitoes)	Lymphatic tissue	Blood	(+ve)
Loaloa	Diurinal	West & Central Africa	Chrysops (deeflies)	Subcutaneous tissue	Blood	

On.volvulus	None	South & Central America	Simulium (blackflies)		Skin, eye	
		Africa				
M.ozzardi	None	South & Central America	Culicoides (midges)	Undetermined site	Blood	
		Carribean	Simulium (blackflies)			
M.perstans	None	South & Central America	Culicoides (midges)	Body cavities	Blood	
		Africa		mesentery		
				Perirenal tissues		
M.streptocera	None	West & Central Africa	Culicoides (midges)	Subcutaneous tissue	Skin	

The Lymphatic Filiariasis covers infection with three closely related nematode worm – W.bancrofti, B.malayi and B.timori, Lymphatic filariasis is a major public health problem in India. The parasite causing non-lymphatic filariasis will not be described here as they are not found in India.

Biology

Infection is introduced by the bite of the mosquito. Infected larvae penetrate the feeding wound in the skin, enters the lymphatics and travel to the lymph node of the definite host (man). After maturation in a few months they develop into white thread like adult worms (male- 40 X 01mm and female 100 X 0.25 mm) and survive for several (10-18) years in the lymphnode. Once fertilized the female discharges, thousand micro filarae (150-300 u long) which dwell in peripheral blood for 5-10 years. There is nocturnal periodicity (between 11 a.m. to 3 a.m.) of microfilarea in the blood stream. The circulating microfilarae are ingested by the mosquito (intermediate host) the organism develop in to infective larvae over the next 2 weeks and are ready to repeat the cycle when the mosquito bites.



Life cycle of Filaria

Incubation period:

a. Pre-patent period – The time interval between inoculation of infected larvae and 1st appearance of m.f.

b. Clinical Incubation period – The time interval from invasion of infective larvae to the development of clinical manifestation commonly 8 to 16 months (9).

Clinical features:

The disease manifestations can be divided into two district clinical types:

I. Lymphatic Filariasis.

II. Occult Filariasis

I. **Lymphatic Filariasis:**

The following stages have been described.

a. Asymptomatic amicrofilaraemia:

In all endemic areas a proportion of population does not show m.f. or clinical manifestations of the disease although they have some degree of exposure to infective larvae as those who become infected. Presently available diagnostic tools can not determine it.

b. Asymptomatic amicrofilaraelmia:

This group are symptomatic but blood are having (+ve) for m.f., they are an important source of infection in the community.

c. Stage of acute manifestation:

There are recurrent epsodes of acute inflammation in lymph glands and vessels. Manifestation are filarial fever, lymphangitis, lymphoedema and epididymo orchitis in male.

d. State of chronic obstructive lesions:

It takes 10-15 years to develop. This phase is due to fibrosis and obstruction of lymphatic vessels causing permanent structural changes.

In Bancroftian Filariasis the features are hydrocele, elephantiasis, chyluria. Elphantiasis may effect the legs, scrotum, arms, penis, vulval and breast. Brugian filariasis is similar but rarely involves genitalia.

II. **Occult filariasis:**

Here classical clinical manifestations are not present and m.f. are not found in blood. It is believed to result from hypersensitivity reaction to filarial anitgen derived from M.F. But known as example is tropical pulmonary eosinophilia.

Diagnosis

1. Demonstration of M.F. in human blood.
    a. The thick film
    b. Membrane filler concentration (MFC) method
    c. DEC provocative test.
2. Contrast lymphangiography.
3. Ultrasonography
4. Immune diagnosis using antigen and antibody detection.

Complications of Lympahatic Filariasis

I. Thrombophlebitis
II. Tenosynovitis
III. Nerve palsies
IV. Dermatosis due to lymphangectsis and stasis in popliteal lymphatics.
V. Pericardial fluid.
VI. Glomerulonephritis-immune-mediated.
VII. Vasculitis
VIII. Mono-arthritis involving the knee joint.
IX. Endomyocardial fibrosis due to pericarditis.
X. Ocular filarisis causing raised intracranial tension and iridocyclitis.

National Filaria control programme is launched from 1955 despite all measures, the disease filariasis is still posing problem in modern medicine. DEC is an effective drug for controlling m.f. but has no action on the adult worms. On the other hand Homoeopathic system of treatment has wider scope as the subtle philosophy advocates in favour of it as ti seen in practice that Homoeopathy is abating fever mitigating the pain and inflammation of lymphatic channel (lymphangitis) and inflammation of lymphnodes (lymphadenitis) and in some cases reducing the swelling, the lymphaoedema but delated affect in removing m.f.

All those days from 1979 author has been trying to combat his own way to the disease filariasis. A study was undertaken from 1979 to 1985 where 83 patients were documented under the given parameters to assess the positive.

Positive Response

a) Cure – disappearance of subjective and objective symptoms for more than 2 years.

b) Improvement – disappearance of subjective and objective symptoms but period relief is within 2 years.

Negative Response

a) Partial improvement.

b) No Improvement.

c) Dropped out.

The results obtained were as follows:

Positive

1) % of cases cured – 29.5
2) % of cases improved – 18

} 47.5%

Negative

1) % of cases showed partial improvement- 22.7
2) % of cases dropped out – 22.7%

} 52.6 %

Most frequently appearing drugs were Bry alb. Apis mel, Rhus, tox. It was observed that a number of cases showed cure / remarkable improvement with Bry.alb., Rhus. tox., Apis mel. but these drugs failed to achieve desired affect in many cases too. It was taken for understanding that it might have occurred due to defect in choosing right medicine / right potency / right repetition schedule.

Therefore the author felt to carry out a prospective study so as to get a reproducible results in a novel way.

Hence another experiment in vitro was carried out with an object to study the effect of

Bry.alb. – Q, 6, 30

Apis.mel. – Q, 6, 30

Rhus tox. – Q, 6, 30

Methodology adopted and results obtained were as follows:

Methodology:

Known microfilaria positive cases were detected and night blood samples were collected. 10 slides were taken. One was kept for control , other nine slides were impregnated with the above drugs and were kept separately for study. On each slide iniform quantity of blood was collected and considerable quantity of blood was added to avoid early drying of blood slides, were seen under microscope. Time taken by microfilariae to die in each slide was recorded and following results were obtained.

Results:

Case 1. Sobani Samal (25 H M)

Case-1		Sobani samal (25 H M)

S. N.	Name of the drugs	Time taken by M.F. to die	
1	Apis mel.	Q	5’21”
2	Bry.alb.	6	6’07”
3	Bry.alb.	30	7’17”
4	Bry.alb.	Q	8’34”
5	Rhus tox.	30	10’0”
6	Apis mel.	30	12’15”
7	Apis mel.	6	13’26”
8	Rhus tox.	Q	16’20”
9	Rhus tox.	30	16’20”
10	Apis mel.	Q	16’20”

Case-II		Sakuntala Debi (30 H F)	
S. N.	Name of the drugs	Time taken by M.F. to die	
1	Rhus tox.	30	9’5”
2	Apis mel.	Q	11’30”
3	Apis mel.	6	12’15”
4	Apis mel.	30	12’55”
5	Rhus tox.	6	14’10”
6	Bry.alb.	6	16’05”
7	Bry.alb.	Q	16’05”
8	Rhus tox.	Q	16’05”

9	Bry.alb.	30	17’07”
10	Control		17’07”

Case-III		Subash Ch.Muduli(12 H M)	
S. N.	Name of the drugs	Time taken by M.F. to die	
1	Apis mel.	30	7’18”
2	Apis mel.	Q	10’07”
3	Bry.alb.	Q	10’16”
4	Apis mel.	6	11’24”
5	Bry.alb.	6	12’02”
6	Rhus tox.	Q	17’30”
7	Bry.alb.	30	18’10”
8	Rhus tox.	6	18’20”
9	Rhus tox.	30	18’10”
10	Control		18’20”

Case-IV		Maguni.Muduli (12 H M)	
S.N.	Name of the drugs	Time taken by M.F. to die	
1	Rhus tox.	30	5’02”
2	Apis mel.	Q	6’22”
3	Apis mel.	6	7’06”
4	Rhus tox.	Q	8’45”
5	Apis mel.	30	8’57”
6	Rhus tox.	6	11’11”
7	Bry.alb.	6	14’08”

8	Control		18’45”
9	Bry.alb.	30	20’16”
10	Bry.alb.	Q	22’00”

Case-V		Sailabala Muduli (35 H F)	
S.N.	Name of the drugs	Time taken by M.F. to die	
1	Apis mel.	30	8’15”
2	Bry.alb.	6	13’43”
3	Apis mel.	6	16’50”
4	Rhus tox.	Q	17’35”
5	Bry.alb.	30	20’10”
6	Rhus tox.	30	21’17”
7	Control		21’17”
8	Rhus tox.	6	21’17”
9	Bry.alb.	Q	22’40”
10	Apis mel.	Q	25’43”

Case-VI		Dambaru Routa (14 H M)	
S.N.	Name of the drugs	Time taken by M.F. to die	
1	Rhus tox.	30	5’57”
2	Rhus tox.	6	7’01”
3	Rhus tox.	Q	8’57”
4	Apis mel.	6	9’40”
5	Apis mel.	30	10’42”

6	Bry.alb.	6	11’02”
7	Apis mel.	Q	10’04”
8	Bry.alb.	30	11’
9	Bry.alb.	Q	12’
10	Control		19’

Again the medicines selected on that basis acted as acute remedy to mitigate the acute exacerbation of the chronic state, which validates the Homoeopathic concept that Homoeopathic medicine do not act on disease organism but on host factor (vital force) which in turn through resistance and the immune system remove the disease.

Another retrospective study was carried with following objective.

1. To have a comparative study between a group of patients under homoeopathic medicament from the beginning of the diseases filariasis with another group of patients under homoeopathic medicament after allopathic treatment i.e. D.E.C. & other antibiotics for the disease filariasis who have periodic relapses.
2. To ascertain most frequently occuring drugs among cured cases.
3. To find out the characteristic features of frequently occuring drugs.
4. To find out most suitable potency(s)
5. To determine the repetition schedules.

Methodology:

Following criteria were taken for diagnosis of the diseases.

1. Bouts of fever accompanied by
    - Pain, tenderness and erythema along the course of inflammed lymphatic vessel called lymphangitis.
    - Pain, tenderness and erythema of the lymph nodes called lymphadenitis.
2. Lymphoedema
3. Chyluria/ eqididymitis/ orchitis / funiculitis
4. Increased eosinophils.
5. M.F. in night blood.

Parameters used to asses the improvement were as follows:

I. Positive Response

a. Cure-Complete disappearance of symptoms / signs more than five years.

b. Improvement.

i. Marked improvement complete disappearance of symptoms signs for more than two years.

ii. Moderate improvement – Disappearance of fever, lymphangitis, lymphadenitis, normal eosinophil level.

iii. Mild improvement – Disappearance of fever, lymphangitis, lymphadenitis but no change to m.f. & eosinophils.

II. Negative Response

a. No improvement – There is no reduction of signs / symptoms of the disease inspite of our several days medication.

b. Dropped out – Patient did not stick to our treatment for sufficient period of treatment.

Patients were collected from Dr. A.C.Homoeopathic Medical College & Hospital and author's clinic. In each case symptoms were collected from patients in a standardised case recording format and were repertorised in classical method and medicines were prescribed in 50 millesimal and centesimal scale.

Results:

204 patents were scanned and by means of above diagnostic features, cases were diagnosed. As per the fixed parameters the results were documented. They are as follows:

Table-I

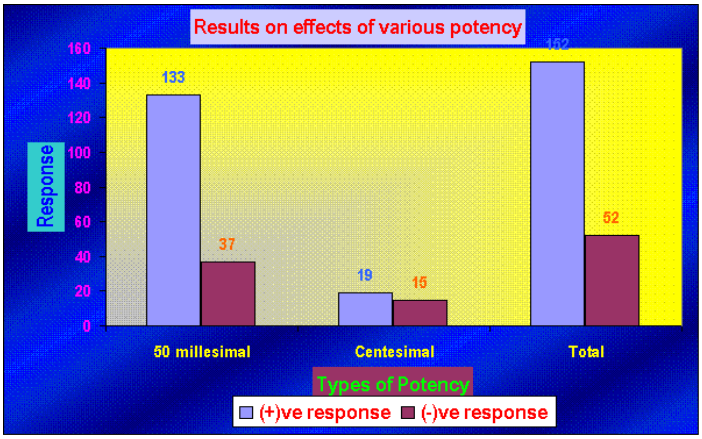
	Positive Response					Negative Response		
Types of cases	Cure	Mark Impr.	Mod. Impr.	Mild Impr.	Total	No. impr.	Dropp.	Total
Cases without allopathic directly with homoeopathy	9	13	15	35	72	12	20	20
Cases after allopathy with homoeopathy	40	17	18	5	80	9	11	11

Results on effects of various potency :

Table-II

Types of potencies	(+)ve response	(-)ve response
50 millesimal	133	37
Centesimal	19	15

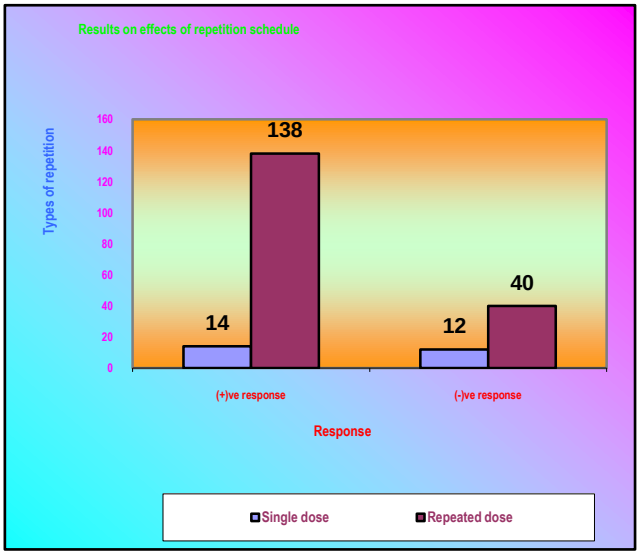
Total	152	52



Results on effects of repetition schedule:

Table-III

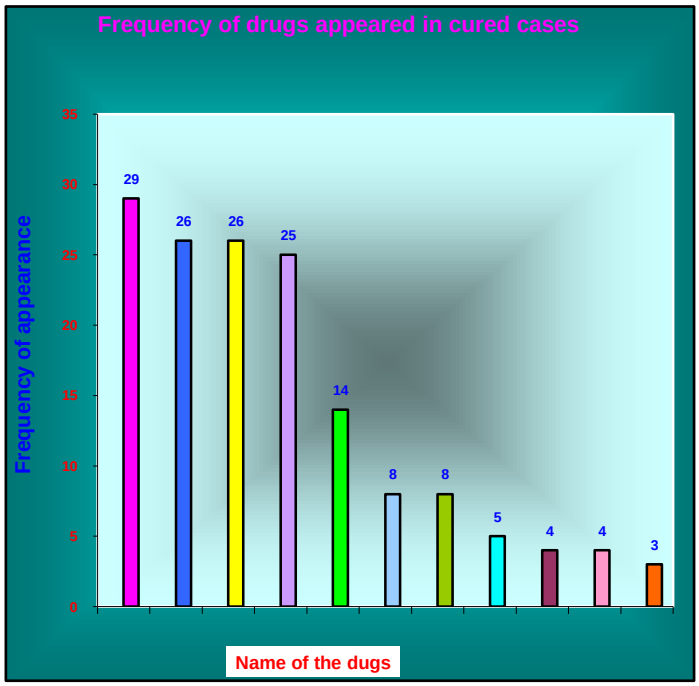
Types of repetitions	(+)ve response	(-)ve response
Single dose	14	12
Repeated dose	138	40



Frequency of drugs appeared in cured cases:

Table-IV

Name of the dugs frequency of appearance	Bry a.	Ars a.	Rhus . t	Apis m.	Puls.	Nat. m.	Bell.	Sil.	Phos .	Sulp h.	Calc. c
	29	26	26	25	14	8	8	5	4	4	3



Result analysis:

Characterestic features of frequently occuring drugs.

Bry. alb.

1. Lymphoedema < exertion / evening / warm – 29
   - rest / morning / cold - 28
2. Thirst (+++) with dry tongue – 26
3. Fever with thirst – 26
4. Constipation without desire – 26
5. Bitter vomiting with bitter taste in mouth with thirst – 25
6. Chill with external coldness – 24
7. Sour smelling sweat – 24
8. Fever with headache > pressure – 24

Ars. alb.

1. Lymph oedema < by cold – 26
   With burning > warm - 26
2. Fever – periodic < night – 26
   < mid night / mid day - 25
3. Chill with thirst - 25
4. Thirst for small quantities of warm water - 25

5. Restlessness - 25
6. Chilly patient - 24
7. Aversion sweets - 24
8. Desire – warm food / drink – 24

Rhus. tox.

1. Fever < at night - 26
2. Fever with thirst with bitter taste in mouth - 25
3. Restlessness - 25
4. Lymphangitis / Lymphadenitis / Myalgia / Lymphoedema
   < rest / cold – 25
   - motion / warm - 25
5. Pruritus with oedema < cold - 24
6. Chilliness with restlessness with dry tongue - 24

Apis mel.

1. Fever with chilliness with thirst - 24
2. Thirstless with dry tongue in other times - 24
3. Oedema with pruritus < warm, > cold 23
4. Rt. Sided oedema - 23
5. Lymphangitis / Lymphadenitis with itching - 23

Pulsatilla.

1. Fever with chilliness without thirst with dry tongue - 13
2. Lymphangitis / Lymphoedema / Lymphadenitis
3. Bitter vomiting with bitter taste in mouth with thirstlessness – 12
4. Sweat on single parts - 12
5. Weeping disposition – 12
6. Chilliness wants open air – 12
7. Fever with headache > by pressure – 12

Results obtained from comparative study of group of patients with homoeopathic medicines alone not taking allopathic medicine and after allopathic medicines were processes for reliability test through chi-square test by using 2X2 contingency table. On referring to chi-square table with 1 degree of freedom the value of chi-square for a probability of 0.05 is 3.841. Since the calculated value (3.9) is much above, we conclude that the Null hypothesis is rejected and the result is significant and it is established statistically that homoeopathic medicine act better after allopathic medicine.

Observation to the results of positive response provides us another inference that large number of cure and marked improvement are seen when homoeopathy is prescribed after allopathic treatment. D.E.C. kills the m.f. but no effect on adult worms, wherein homoeopathy the microfilarea disappears at last. It is perhaps due to Hering's law of cure the signs / symptoms that appears first will disappear "last and adult worms die first, which appears last. By this homoeopathic medicine is not preventing the communicability of the diseases immediately. In other hand D.E.C. is preventing communicability of the disease, but no effect on adult worm. Therefore both have their merits / demerits in the treatment of filariasis.

Now it is an urgent need to set up a new principle / a new practice and have new drugs to combat m.f. first in order to prevent communicability of the disease and followed by constitutional drug to change the constitutional dyscrasia by which man can be protected to filariasis in future.

Results obtained from effects of various potencies were prescribed for similar test and calculated value (7. 71) is much above. We conclude that Null hypothesis is rejected and the result is significant and it is established scientifically that homoeopathic medicine in 50 millesimal scale acts better than centesimal scale.

N.B.: Exception to the cases of chyluria, who responded to single dose of very high potency i.e. Kali bichromicum. Similarly Bry alb. 200 single dose to all cases indicating Bry.alb.

Results obtained from effects of repetitive schedules were processed for similar test and calculated value (0.56) is much less. The Null hypothesis is accepted and the result is non-significant and it is established scientifically that there is no difference between single dose & repeated doses in the treatment of filariasis.

Conclusion:

From above study it is envisaged that:

a. Homoeopathic medicines act curatively and provides better response, when it is prescribed after allopathic treatment.

b. 50 millesimal acts better than centesimal scale exception to this is Kali bichromicum 10M in chyluria and Bry alb. 200, when they are indicated.

c. Regarding repetition schedule, it is difficult to opine with this study. Therefore a separate study is needed to be designed to opine on the effect of single dose and repeated doses.

d. While prescribing for Homoepathic purpose characteristic symptoms count more value than common symptoms which validates, the observation of earlier stalwarts of Homoeopathy.

However, it is concluded that to ascertain the results obtained by this retrospective study needs to be reconfirmed by a prospective study i.e. homoeopathy for adult worms and allopathy for m.f.

Apart from that homoeopathy needs new principles / new kind of practice and new drugs to combat m.f. first to prevent the wrath of the communicability of disease filariasis. Thereby homoeopathy can rise to the zenith in the treatment of filariasis compared to the counter part allopathy.

Bibliography

1. Dilip Mathai, Humaqn Filariasis & Related infections, API Text Book of Medicine, Editorial in Chief – G.S.Sainani, 6th Edition, 1999, Page-106.
2. Thomas B.Nutmanm Peter F. Wellen, Filariasis & Related Infections (Loiasis, Onchoceriasis & Dracunculosis, Harrison's Principles of Internal Medicines Vol-1 exclusive rights by Tata Mc Graw-hill Book co, Singapore.
3. WHO 1998, World Health Report 1998, Life in the 21st Century A vision for all, Report of Director General WHO.
4. WHO 1999, Health situation in South East Asia Region 1994-97 Region office for SEAR, New Delhi.

5. Govt. of India (1996) Annual Report 1995-96, DGHS, Ministry of Health & Family Welfare, New Delhi. [Epidemiology of Communicable diseases, Park's Text Book of Preventive & Social Medicine, Park. K, 16th Edition, 2000, Published by M/S Banarasi Das Bhanot, pages-204].
6. ICMR, Annual Report of the Director General 1994-95.
7. D.H.S., Report Govt. of Orissa, 1999.
8. Dilip Mathai, Human Filariasis & Related Infections, API Text Book of Medicine, Editorial in Chief G.S. Sainani, 6th Edition, 1999, Page-106.
9. 14-WHO. Techni Rep. Ser. No.702 (page No.204 K.Park).
10. 15 – Price, E.W. and Henderson, W.J. (1979). Trans R.soc. Med. Hyg., 73:640-7.
11. Sainani G.S., Editorial in Chief, API Test Book of Medicine, 6th Edition 1999, Page-108.