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# JAFFNA MEDICAL JOURNAL

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Editorial

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*Case Reports :*

Abdominal Aortic Aneurysm — *Natkunam' R, Palanivel. K.*

Depression in Thyrotoxicosis-A case report — *Ganesvaran. T, Sreeharan. N.*

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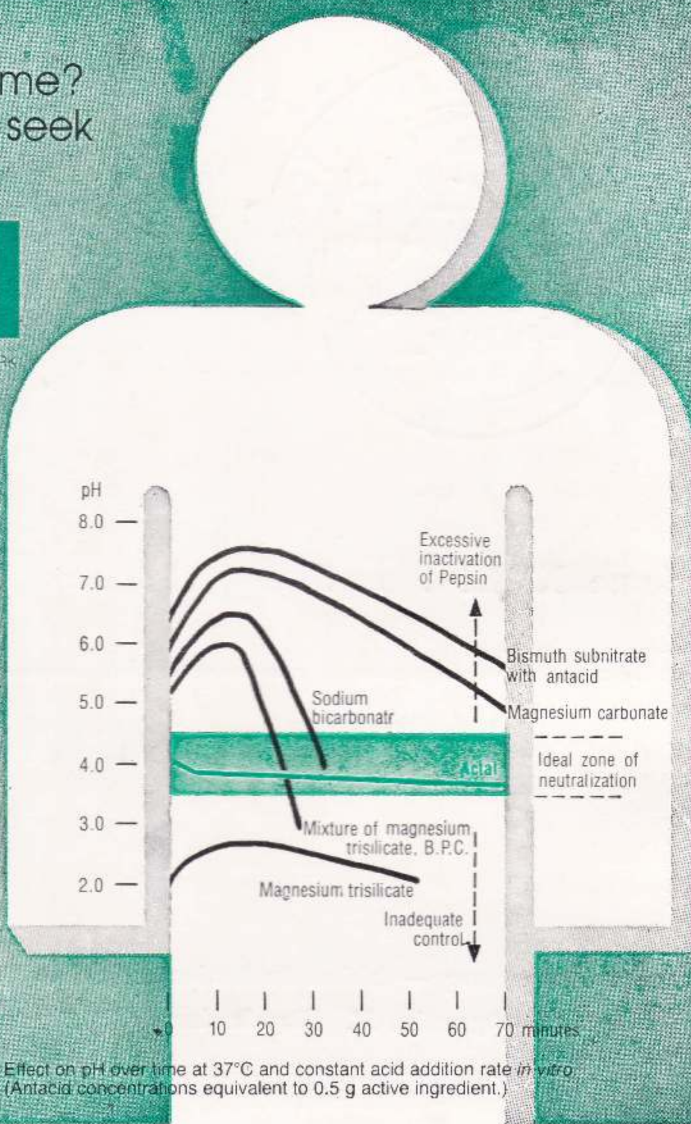


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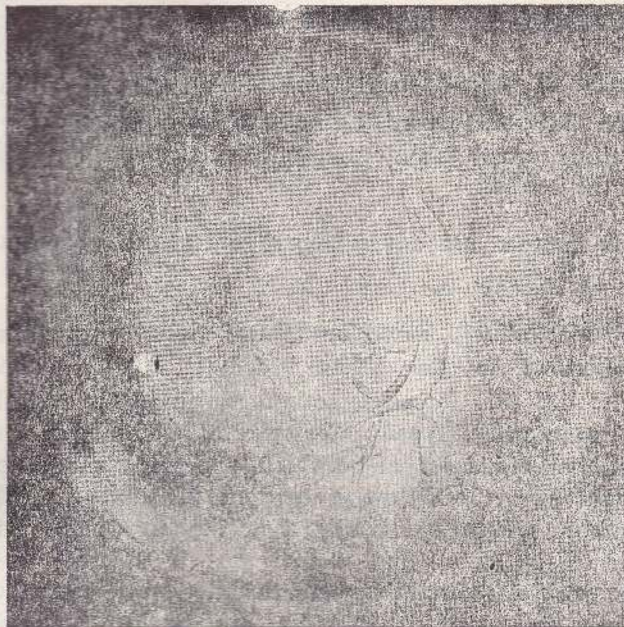

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Original articles and Case Reports are welcome and should be submitted to the Editor Jaffna Medical Journal, The Library, General Hospital, Jaffna. Articles are accepted on the understanding that they are submitted to only this journal, and that articles and their illustrations become the property of the journal.

Communications regarding business matters and advertising should also be addressed. to the Editor.

Manuscripts. The Jaffna Medical Journal will subscribe to the policy of uniform requirements for manuscripts described in the British Medical Journal (1979) **1** : 532-535 and the Lancet (1979) **1** : 428-431. Intending authors are advised to consult these instructions. Two copies of manuscripts, typed on one side only of good quality white paper with double spacing and 3 cms margins at both left and right should be submitted. Each manuscript should have the following sections in sequence:- title page (on a separate page) with authors names and listing their highest degrees and diplomas, their positions at the time of the study, and present post if different from the above, the institution where the work was carried out and the address of the author who will deal with correspondence and reprints; summary; introduction; materials and methods; results; discussion; references. Tables should be typed on separate sheets of paper and numbered in sequence with Roman numerals. Figures should be numbered with Arabic numerals. Both tables and figures should have accompanying legends. Photographs should be good quality, unmounted glossy prints. All illustrations should have a label pasted on the back indicating the name of the author and the figure number.

**References :** In the text references should be numbered consecutively in Ababic numerals The reference list should be typed in numerical order, and abbreviation may be used in accordance with the form adopted in Index Medicus. Where a journal is not listed by Index Medicus the full title should be given. Where the number of authors is six or less, all names with intials should be given. Where there are more than six authors, only the first three names followed by et al should be used. In citing references give in sequence author (s) name (s), year of publication, full title of the paper, name of the journal, *volume* number (underlined), and first and last page numbers. In the case of books, the author (s) name (s), year of publication, Editors names where relevant, title of book, page numbers place of publication and publishers name should be given.

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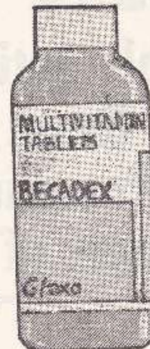

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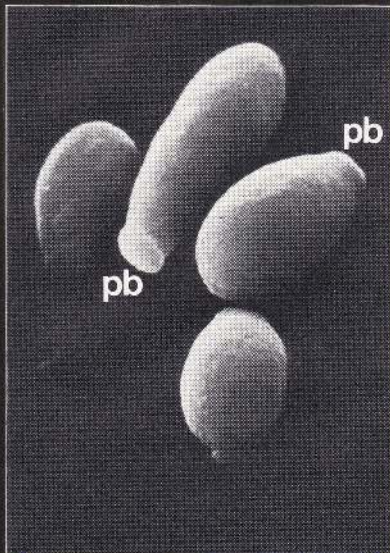
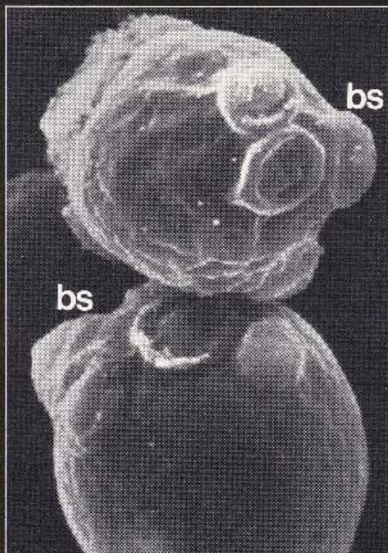
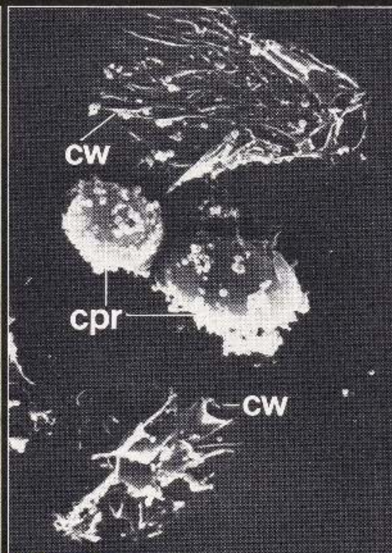



1. Untreated cells appear as isolated yeast forms in an oval shape and with a smooth surface showing the formation of polar buds (pb).




2. Upon exposure to a fungistatic dose ($10^{-7}$ M) of miconazole the cells tend to cluster. Budding becomes disorganized with visible budding scars (bs) that are randomly distributed over the surface of the cells.




3. Treatment with a fungicidal dose of miconazole causes the cell wall (cw) to burst. Vesicles of cytoplasm disintegrate and adhere to the surface of yet unbroken cells (cpr). (The interior of the cells is completely lytic).

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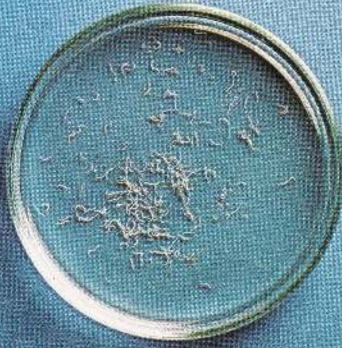
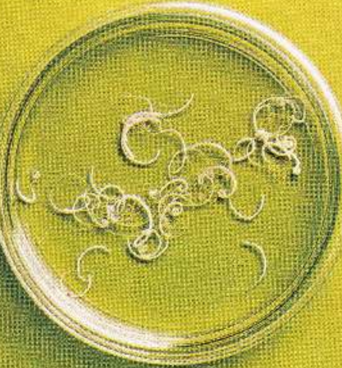


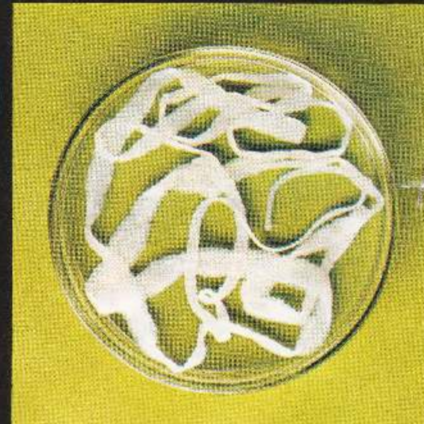
Roundworm

Hookworms



Whipworms

Threadworms



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# Editorial

## Welcome New Docs

It's with great pleasure and pride, we welcome the first batch of new doctors who have recently passed out of the medical school of the University of Jaffna. This indeed is a milestone in our progress in the field of medicine. Though Jaffna was the first seat of medical education in Sri Lanka as far back as 1848 when Dr. Samuel. F. Green established the medical school at Manipay with seven students, it was closed in 1875 when the Colombo medical school was established.

The new doctors have proved that they are of good calibre by their good performance at the final M. B. B. S. examination, almost fifty per cent of the candidates securing second class honours including two distinctions in medicine. This is a great achievement when one considers the hardships they had to undergo during their student days. They started their medical education in the temporarily acquired building of Kaithady Ayurvedic School, which incidentally is a refugee camp now. Even after moving into the partly completed building at Thirunelvely, they were faced with the lack of space, disturbances by the noises and dust from the construction of building and lectures in ill ventilated halls. It is a pity that before the building is complete at this sluggish pace, few more batches of doctors would emerge from this institution. Even though the construction of buildings were started simultaneously at the Ruhuna campus and the University of Jaffna, the building of not only the faculty of medicine but also of a new teaching hospital is complete, at the Ruhuna campus. Will it ever be a dream — a new teaching hospital for Jaffna?

As observed in Dr. J. F. Stokes report of 1979, the Jaffna hospital has run down owing to the over crowded wards, clinics and seriously deficient nursing and medical staff. He found it unsuitable for post graduate education. Should this mean that our new doctors cannot pursue their post graduate studies and medical research? Lack of facilities should not be an excuse for postponing postgraduate education. In spite of these shortcomings, our clinical teachers most enthusiastically taught the clinical skills and knowledge by the bedside always reminding the students of the importance of doctors being blind to caste, religion, colour, race or language, when they work in any part of the globe.

The students also had the opportunity to render their service before their final exam in the many refugee camps together with the other J. M. A. and other voluntary organisations as such the value of service to mankind is too well known to them.

While wishing them a good future in the noble profession concerned with healing of the sick, it would be appropriate to remind them of a famous " Medical Litany ",

"From inability to leave well alone;

From too much zeal for what is new and contempt for what is old;

From putting knowledge before wisdom, science before art cleverness before commonsense;

From treating patients as cases; and

From making the cure of a disease more grievous than its endurance,

Good Lord, deliver us "

It is time the newly appointed Hon. Minister of Teaching Hospitals, take action to build a new teaching hospital close to the faculty, as has been done in Galle and Peradeniya thereby fulfilling the desired goal of the future doctors to pass out from the Jaffna University.

**Infectious connection.** "Because of the interconnected pathways of the upper and lower respiratory system and the vulnerability of both areas to the same predisposing factors, infection at either site may quickly expand into the sinobronchial syndrome. Therefore, antibiotic and symptomatic therapy should be aimed at both bronchitis and the possibly coexistent sinusitis."[1]

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*Tissue penetration is regarded as essential to therapeutic efficacy, but specific antibiotic tissue levels have not been directly correlated with specific therapeutic effects.

†Because not all strains of pathogens are susceptible, it is recommended that routine culture and susceptibility tests be performed.


1. Fulco OJ: The respiratory system as a unit: An overview of sinobronchial infections. Respiratory infections: Update on the role of Vibramycin® (doxycycline) in the treatment of sinobronchial infections and pneumonias. *Postgrad Med* (suppl), January 1981, pp 20–29.



*Please see Brief Summary of Vibra-Tabs® / Vibramycin® (doxycycline hyclate) prescribing information on next page.*

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**Mycoplasma pneumoniae** – Agents of psittacosis and ornithosis,
Agents of lymphogranuloma venereum and granuloma inguinale,
**Chlamydia trachomatis** – The spirochetal agent of relapsing fever *(Borrelia recurrentis)*

The following gram negative microorganisms : *Haemophilus ducreyi* (chancroid), *Pasteurella pestis,* and *Pasteurella tularensis, Bartonella bacilliformis, Bacteroides* species, *Vibrio comma* and *Vibrio fetus, Brucella* species (in conjunction with streptomycin).

Because many strains of the following groups of microorganisms have been shown to be resistant to tetracyclines, culture and susceptibility testing are recommended.

Doxycycline is indicated for treatment of infections caused by the following gram-negative microorganisms, when bacteriological testing indicates appropriate susceptibility to the drug :

*Escherichia coli, Enterobacter aerogenes, Shigella* species, *Mima* species and *Herellea* species, *Haemophilus influenzae* (respiratory infections), *Klebsiella* species (respiratory and urinary infections).

Doxycycline is indicated for treatment of infections caused by the following gram-positive microorganisms when bacteriologic testing indicates appropriate susceptibility to the drug :

**Streptococcus species**

Up to 44 percent of strains of *Streptococcus pyogenes* and 74 percent of *Streptococcus faecalus* have been found to be resistant to tetracycline drugs. Therefore, tetracyclines should not be used for streptococcal disease unless the organism has been demonstrated to be sensitive.

For upper respiratory infections due to group A beta-hemolytic streptococci, penicillin is the usual drug of choice, including prophylaxise of rheumatic fever.

**Streptococcus pneumoniae**

*Staphylococcus aureus,* respiratory, skin and soft-tissue infections. Tetracyclines are not the drug of choice in the treatment of any type of staphylococcal infection.

When penicillin is contraindicated,doxycycline is an alternative drug in the treatment of infections due to :

*Nesseria gonorrhoea, Treponema pallidum* and *Treponema pertenue* (syphilis and yaws)

*Listeria monocytogenes, Clostridium* species, *Bacillus anthracis, Fusobacterium fusiforme* (Vincent's infection), *Actinomyces* species

In acute intestinal amoebiasis doxycycline may be a useful adjunct to amoebicides.
In severe acne doxycline may be useful adjunctive therapy.

Doxycyclineis indicated in the treatment of trachoma, although the infectious agent is not always eliminated, as judged by immunofluorescence.

Inclusion conjunctivitis may be treated with oral doxycycline alone, or with a combination of topical agents.

# Toxaemia of Pregnancy - A Critical Evaluation of A Two Year Study *

**M. Jegasothy,** MRCOG ( Gt. Brit. ) [1]
**P. Thayalasekaran,** MBBS ( Cey. ) [2]
**M. Sivasuriya,** FRCS (Eng.), FRCS (Edin.), FRCS (Glasg.), FRCOG (Gt. Brit.) [3]

**Summary :**

*A critical analysis of some aspects of toxaemia of pregnancy managed in the University Obstetric Unit, General Hospital, Jaffna, between October 1980 to December 1982, is presented.*

*Two hundred and fifty eight cases were encountered, amongst a total of 3471 deliveries, giving an incidence of 7.43 percent. The analysis related to the relationship of toxaemia in regard to maternal age, parity, foetal sex, foetal weight at birth, and other associated factors. The incidence of eclampsia, was high ( 6.6 per 1000 ) which is well above that observed in developed countries. This underscores the need for much improvement in ante-natal care for our patients. It was noteworthy that the foetal sex had a significant influence in the aetiology of pre-eclampsia in this series, in that most of the foetuses were of the female sex. Twenty-one patients were delivered by Caesarean section, giving a Caesarean rate of 8.2 percent. The perinatal mortality was high and this was not unexpected considering the constraints on the availability of adequate ante - natal and neonatal care. Happily, there was not a single maternal death in this series.*

**Introduction :**

Lewis (1964)[1] used the term toxaemia of pregnancy to refer to the following three conditions.

1. Pre-eclampsia and eclampsia.
2. Essential hypertension complicating pregnancy with or with out exacerbation.
3. Chronic nephritis complicating pregnancy with or without exacerbation,

Pre-eclampsia is the term used for the common variety of toxaemia in which, typically oedema, hypertension and proteinuria are found in the later weeks of pregnancy in a previously healthy patient. They may appear in any order, but proteinuria usually comes last. In a typical case, the blood pressure is elevated above the level of 140 mm Hg systolic and 90 mm Hg diastolic

* *University Department of Obstetrics and Gynaecology, General Hospital, Jaffna.*

1. *Lecturer.*
2. *Lecturer.*
3. *Professor and Head of Department.*

In this study, a persistent blood pressure of 140/90 mm of Hg and above was considered as toxaemia. An elevation of the diastolie blood pressure by 15-20mm of Hg is considered to be due to pre-eclampsia by most authorities. This is because the normal blood pressure varies from race to race and with the age of the patient. The normal blood pressure for a female in the tropics may be much lower than her western counterpart of corresponding age (Lawson and Stewart 1967)[2]. As the pre-pregnant and early pregnant blood pressures were not known in the majority of our cases, the incidence could be still higher,

Since it was difficult to distinguish between pre-eclampsia, essential hypertension (with or without superadded pre-eclampsia) and, presumably mild forms of chronic nephritis, no attempt was made to distinguish them.

The incidence of severe pre-eclampsia and eclampsia in a population reflects the standard of ante-natal care. Good and regular ante-natal care would help to detect toxaemias early and this would enable the Obstetrician to arrest or slow the progress to a more severe form. This when achieved, would obviously improve both the maternal and foetal prognosis in toxaemia of pregnancy.

**Materials and Methods:**

This is a retrospective analysis of all cases of toxaemia of pregnancy admitted to the University Obstetric Unit, General Hospital Jaffna, during the period October 1980 to December 1982. A total of 258 cases were encountered, amongst a total of 3471 deliveries. Some of these cases were admitted in the postpartum period with either eclampsia or with elevated blood pressure. Some cases of mild toxaemia who were discharged and a few others who left against medical advice, before they were delivered, subsequently defaulted.

The incidence was determined in relation to the number of deliveries (including stillbirths) that occurred during the period of study. Classification was into mild and severe cases in accordance with the International Classification of Diseases (ICD) based on the recommendation of the World Health Organisation (WHO) and International Federation of Obstetricians and Gynaecologists (FIGO). Mild cases were those in whom the diastolic blood pressure was less than 110 mm Hg (ie 90 — 110 mm Hg), with more than a trace of proteinuria, but less than 2 g per litre (less than 2 parts), and severe pre-eclampsia referred to those patients with a proteinuria of 2 g per litre or more (2 parts or more) and/or diastolic blood pressure of of 110 mm Hg or the following symptoms: headache, epigastric pain, visual disturbance, etc., or extensive generalised oedema.

**Results :**

These are summarised in Tables 1 - 8

**Incidence :**

The incidence of toxaemia of pregnancy was 7.43 percent ( Table. 1 ). Dewhurst (1981)[3] and Browne and Dixon, ( 1977 )[4] reported an incidence of 5 - 15 percent in the U. K. A striking difference was however seen in the incidence of eclampsia which was 6.6 per 1000 in this study when compared with that reported by Browne and Dixon ( 1977 )[4] for the U.K., (0.40 per 1000) and Greenhill and

Table I

**Incidence**

| | |
|---|---|
| Total No of deliveries during the period of study | — 3471 |
| No of Patients with Toxaemia of Pregnancy | — 258 |
| No of Patients with Eclampsia | — 23 |
| No of Patients with mild toxaemia discharged before delivery | — 17 |
| No of Patients who left against medical advice before delivery | — 02 |
| No of Patients with Post-partum Eclampsia/Toxaemia | — 03 |

Friedman (1974)[5] for the USA ( 0.50 per 1000 ). Proteinuria was present in 20.7 per 1000 in the present study as compared to 2.45 per 1000 observed by Browne and Dixon ( 1977 )[4].

**Age:**

Forty patients were in the over 35 years age group ( Table 2). It is possible that in some of them essential hypertension could have coexisted, if not, have been the cause.

**Parity:**

Primigravidae accounted for 106 cases (37.2 percent - Table 3). This is low when compared to 66 percent quoted by Browne and Dixon ( 1977 )[4].

**Foetal sex:**

The sex ratio is described as the number of male babies born for every 1000 female babies. In our Unit the sex ratio for all deliveries was 103.16 ( Table 5.) For all the primigravidae this was 105.14. It was 63.83 for all cases of toxaemia.

**Severity of Toxaemia:**

There were 96 cases with hypertension and proteinuria giving an incidence of 40.8 percent (Table 6) - an incidence much higher than in the developed countries where it is around 16 percent (Browne and Dixon 1977)[4].

**Associated Factors:**

Other associated factors in this study were, abruptio placentae 5 percent (13 cases), severe anaemia 5 percent (13 cases), multiple pregnancy 3.1 percent (8 cases) and diabetes mellitus 0.4 pereent (1 case) Table 7.

Table II

**Age Distribution**

| Age in Years | 17-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-43 |
|---|---|---|---|---|---|---|
| (a) All toxaemics | 18 | 72 | 66 | 62 | 32 | 08 |
| (b) Eclamptics | 04 | 07 | 06 | 03 | 02 | 01 |

Table III

**Parity in Relation to Toxaemia**

| Parity | $P_1$ | $P_2$ | | $P_4$ | $P_5$ | $P_6$ | $P_7$ | $P_8$ | $P_9$ |
|---|---|---|---|---|---|---|---|---|---|
| (a) All cases | 106 | 29 | 36 | 32 | 18 | 17 | 08 | 07 | 05 |
| (b) Eclamptics | 13 | 02 | 03 | 01 | 02 | 01 | 01 | — | — |

Table IV

**Recurrent Toxaemia**

| (A) Previous history of Toxaemia | | No of cases |
|---|---|---|
| (a) On one occasion | — | 09 |
| (b) On two occasions | — | 03 |
| (c) On three occasions | — | 01 |
| (B) Previous history of eclampsia | | 07* |

* One of these patients had toxaemia in two earlier pregnancies and, also eclampsia twice, while one other had a single episode of eclampsia and toxaemia thrice previously.

### Birth Weights of Babies and Maturity of Foetus :

The birth weights of babies born amongst the toxaemic mothers is shown in Tables 8 and 9, while Table 10 shows the maturity of the foetus at the time of delivery.

### Mode of Delivery :

Caesarean section was performed in twenty-one out of the 258 toxaemic patients giving a Caesarean rate of 8.2% for the series (Table 11). The indications for Caesarean section are shown in Table 12.

### Perinatal Mortality

The uncorrected rinatal mortality was very high; in the or r of 170 per 1000. Browne and Dixon (1977)[4] give a figure of 21 per 1000 in pre-e ampsia without proteinuria and 91 per 1000 in pre-eclampsia with proteinuria. For eclampsia our figure was 695 per 1000, which is significantly higher than the figure (166 - 400 per 1000) quoted by Browne and Dixon (1977)[4].

### Maternal Mortality and Morbidity :

Happily there was not a single maternal death. One patient developed hemiparesis and subendocardial ischaemia following eclampsia which responded to treatment. Maternal mortality in eclampsia reported in other studies varied from 2.9 percent to 10-3 percent (Browne and Dixon 1977)[4].

### Discussion :

The incidence of toxaemia in pergnancy varies widely in different parts of the world. Altho gh it was 7-43 percent in our study, it must be stressed that it

Table V

**Foetal Sex**

| | Male | Fema,e |
|---|---|---|
| Total deliveries | 1742 | 1698 |
| Amongst all Primigravidae | 491 | 467 |
| Amongst all toxaemia patients (irrespective of parity) | 90 | 141 |
| Total No of Primigravidae with toxaemia | 54 | 51 |
| Toxaemic Primigravidae with albuminuria | 08 | 14 |
| Toxaemic Primigravidae without albuminuria | 46 | 37 |
| Eclamptics | 03 | 12 |

Table VI

**Severity of Toxaemia**

| Degree | No of Cases | Percentage |
|---|---|---|
| (a) Mild | 139 | 53‘8% |
| (b) Severe | 96 | 37·2% |
| (c) Eclampsia | 23 | 9·0% |

Table VII

**Associated Factors with Toxaemia**

(a) Twins — 07
(b) Triplets — 01
(c) Abruptio Placentae — 13
(d) Diabetes Mellitus — 01

is often difficult to be quite precise sbout the incidence as this would depend on factors such as regular recording of the blood pressure, testing urine for protein and also on the criteria adopted for diagnosis. It is to be noted that even though the general incidence of toxaemia is comparable to figures from the western countries, a disproportionately high incidence of the severe degrees of toxaemia seems to be prevalent here. This is probably because we are missing the cases of mild toxaemia on the criteria we employ for blood pressure, namely 140/90 mm Hg which may not be the 'norm' for our women. Also, the inadequate ante-natal care results in the progress and deterioration of the disease Another factor is that with intrauterine

death of the foetus in toxaemia, the blood pressure tends to fall, so that cases seen at this stage would be missed. It is significant that there were 13 primigravidae amongst the eclamptics (56·5 percent) in this study. Recurrent toxacmia was observed in 20 patients (Table 4) No seasonal variation was observed in the incidence of eclampsia. Neutra (1974) [8] has shown a relationship of eclampsia to maximum temperature and relative humidity. This aspect was not investigated in our study.

The foetal sex ratio of 63·83 for all cases of toxaemia in our study contrasts with the figures given by Guthman and Hildebrandt (1936)[6], which was 129, Amongst eclamptics sex ratios varying from 88 to 135 have been reported, giving an average incidence of 122 (Campbell et al 1983)[7]. In the present study, the sex ratio was available only in 15 out of the 23 eclamptics (male; female - 3 : 12) Though there was a predominence of female foetuses in eclamptics the sex data is inadequate and the series yet too small to draw valid conclusions. In primigravidae with proteinuria and hypertension the sex ratio was 57.14. Campbell et al (1983)[7] quote a figure of 107 for their series. The ratio in primigravidae with hypertension (without proteinuria) was 124,3. This compares with the figure of 117.3 reported by Campbell et al (1983) [7] In our study, there was a preponderance of female foetuses in those with severe pre-eclampsia, eclampsia and multigravid toxaemics. This was not in agreement with the findings of other workers (Campbell et al 1983)[7]. There might appear to be a discrepancy in the number of cases included for the purpose of analysing the foetal sex and the total deliveries. This is because the sex of the foetus was not determined in every case of macerated stillbirth and/or abortion.

Table VIII

**Birth Weights (Not according to Maturity)**

| Birth Weights | < 2·2 kg. | 2·2-2·49 Kg. | 2·5-3·99 Kg. | > 4 Kg. |
|---|---|---|---|---|
| No of Babies | 105 | 39 | 100 | 01 |

Table IX

**Birth Weight of Term Babies**

| Birth Weights | < 1Kg. | 1-1·49 Kg. | 1·5-1·99 Kg. | 2-2·49 Kg | 2·5-2·99 Kg | > 3Kg. |
|---|---|---|---|---|---|---|
| All Cases | 1 | 1 | 9 | 35 | 43 | 49 |
| Severe toxaemia and eclampsia | 0 | 1 | 8 | 17 | 11 | 10 |

Table X

**Maturity of Foetus at Time of Delivery**

| | | No of Patients |
|---|---|---|
| Pre term | — | 75 |
| Term | — | 148 |
| Post Term | — | 05 |
| Unknown | — | 17 |

Table XI

**Mode of Delivery**

| | No of Cases |
|---|---|
| (a) Caesarean section | — 21 |
| (b) Vaginal delivery | — 234* |

*6 were Forceps Deliveries

Table XII

**Indication for Caesarean Section**

| Indication | No of Patients |
|---|---|
| (a) Foetal distress | — 07 |
| (b) Slow Progress of Labour | — 05 |
| (c) Not responding to Treatment | — 03 |
| (d) Previous stillbirth associated with toxaemia | — 03 |
| (e) Two previous Caesarean sections | — 02 |
| (f) Breech Presentation | — 01 |

Intrauterine growth retardation was a significant feature in many of our cases. Percival (1980)[9] stresses that toxaemia does tend to keep a foetus smaller for its gestational age than a normal pregnancy. However, Bonnar and Redman (1977)[10] while observing that pre-eclampsia may, if its course is prolonged, be associated with severe foetal growth retardation, comment however, that sudden fulminating pre-eclampsia, because of its short duration, is more likely to be associated with a well grown but asphyxiated foetus. Long et al (1980)[11], showed that there is a direct relationship of intrauterine growth retardation to the duration of pre-eclampsia. As the duration of the toxaemia was not known in every case no significat conclusion could be drawn by us from the present study.

The major causes of foetal mortality were prematurity and low birth weight. Another significant factor was abruptio placentae. A study by Ramadas el al (1980)[12] has already confirmed these findings.

In conclusion, it might be stated that though it may not be possible to eliminate pre-eclamptic toxaemia altogether it is, however, possible to effect a considerable reduction in the incidence of eclampsia and severe pre-eclampsia, by meticulous ante-natal supervision and prompt admission to hospital of all those patients suspected of having an early toxaemia.

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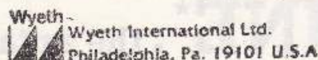



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# Alcoholism in Jaffna

K. Mahadevan *

**Introduction**

Alcohol dependence is a recognised problem in Jaffna, but there is little published data, This paper describes the psycho-social profile and drinking patterns of those alcoholics who are referred for psychiatric treatment.

**Method**

The author personally interviewed all alcoholics referred to the psychiatric clinic at Jaffna General Hospital, or admitted to the inpatient unit at Tellipalai District Hospital, during an eight month period 1 Nov 82 to 31 June 83.

As the alcoholism was very advanced in most cases, diagnosis presented no problem:

Basic demographic data e.g. age, sex, occupation were noted, and the patients were then asked about their drinking: how much of what they drank, where, with whom and so on. Enquiry was also made of drinking patterns in the alcoholic's family.

**Results**

The results for fifty consecutive patients are as follows :

1. Mode of referral : self 10 (20%); brought by relatives 22 (44%); consultation request 18 (36%).
2. Status . New patients 37 (74%); old patients 13 (26%)
3. Address ; Urban 43 (86%); rural 7 (14%)
4. Age : thirties 16 (32%); forties 27 (54%); fifties 4 (8%); sixties 3 (6%)
5. Sex : male 50 (100%)
6. Marital status ; single 7 (14%); married 37 (74%); separated 6 (12%)
7. Religion : Hindu 41 (82%); R. C. 5 (10%); Protestant 4 (8%)
8. Occupation : business/professional 3 (6%); minor government/private sector employees 43 (86%); labourer/farmer 4 (8%)
9. Income : low 3 (6%); medium 38; (76%); high 9 (18%)
10. Beverage preferred : toddy 23 (46%), pot arrack 34 (64%); bottled arrack 22 (44%) beer or imported spirits 15 (30%)
11. Where consumed : home 5 (10%); tavern 23 (46%); restaurant/bar 22 (44%).
12. With whom : male friends 30 (60%); alone 17 (34%); family 3 (6%)

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13. Family drinking: teetotalers 27 (54%); alcoholics or heavy drinkers 20 (40%) social drinkers 3 (6%)

14. Dependence *: psychological 50 (100%); physical 37 (74%)

15. Damage* : psychological 14 (28%); social 39 (78%); physical 9 (18%)

16. Marital strife : present 33 (66%); absent 11 (22%); not married 6 (12%)

**Discussion**

1. Alcoholism in Jaffna is an exclusively male phenomenon, unlike in Western countries where women constitute a small but significant minority (1)

2. The majority (74%) of our alcoholic patients were married. Only 12%[1] were separated, in sharp contrast to figures for western alcoholics. This is a tribute to the stability of marriages in Jaffna. However there was serious marital strife in 66%, due to the drinking.

3. Very few (only (20%) of our alcoholics come to the psychiatric clinic on their own accord. They are generally brought to hospital by relatives because of some serious complication of their drinking e. g. delirium tremens or cirrhosis of the liver. Some are sent direct to the psychiatric clinic (44%), others are referred later from other departments (36%).

   The reluctance of alcoholics to see psychiatrists may be due to the stigma of mental illness, or simply the unavailability of psychiatric care.

4. These patients present in their thirties or forties, after drinking heavily for many years. The advanced state of their drinking problem is reflected in the fact that 74% were physically dependent on alcohol - they had experienced tremulousness, fits or full blown delirium tremens on cessation of drinking.

   Every patient had suffered some damage from his drinking, be it social (e.g. loss of job, debts), psychological (e g. depression, paranoid psychosis) or physical damage.

   The fact that only 26% of this series were follow-up patients suggests that very few of these end-stage alcoholics remain in treatment for long.

5. The majority of patients (86%) were from an urban area, earning between Rs. 500 and Rs. 1,000 as clerks, bus conductors and other minor government or private sector employees. It could be that this social group is particularly at risk for alcoholism or that they are more likely to use the psychiatric services. At any rate, we see few poor farmers from rural areas with drinking problems.

6. The preference for pot arrack ('Kasippu sarayam') or bottled arrack over palmyrah or coconut toddy may reflect the drinking habits of this predominantly urban group. (Note that excise figures for Jaffna reveal that overall, more toddy than arrack is sold in the peninsula).

* *categories not mutually exclusive.*

Beer and imported spirits were drunk occasionally only by the few business/ professional people in our sample.

7. It is customary for our alcoholics to drink with other male friends in a tavern or restaurant / bar, rather than at home (although as the alcoholism progresses they begin to drink on their own, in secret).

Very few of our patients drink openly at home in front of their families, and this may due to social taboos. Alcohol may simply have no role as a social lubricant in Jaffna Tamil homes.

Furthermore, although 40% of our patients had a father or brother who also drink heavily, 54% reported that their family were all teetotalers. This is a very unusual finding.

In the families of our alcoholics drinking is an all - or - none affair: either one is a teetotaler, or one drinks very heavily indeed.

There are relatively few social drinkers. This may be true of Jaffna society as a whole.

8. However, we see only one or two alcoholics a week at the most i. e. this is a highly selected sample of problem drinkers. No general conclu sions about alcoholics, let alone about normal drinking patterns in Jaffna can be drawn from so selective a sample.

We should also note that drinking patterns may be changing, for example due to emigration. Five patients repo rted that their drinking had got out of hand while working abroad. Such changes are in turn likely to alter refe rral patterns in the peninsula.

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# Epidemiology in Health Services Research,

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Health Services Research is concerned with organisational problems — with planning, management, delivery and evaluation of the health services.

It often employs epidemiological methods, since sickness, health, needs of population and measurement of effectiveness of services are described largely in epidemiological terms.

Epidemiology, the basic discipline in community medicine, studies patterns of disease in human populations and the factors that determine these patterns with the view of finding solutions. At one time its application was only in the field of epidemic diseases. Now it is used to study all diseases and events that concern health in populations. This includes the study of the working of health services and evaluation of health programmes. Being a problem oriented discipline, epidemiological methods can be applied under different conditions and at different levels of skills to all types of health services, whether promotive, preventive, diagnostic, therapeutic or rehabilitative. Population, therefore, does not mean only the community, but it can as well mean the hospital population.

The main approaches of epidemilogy are summarised in Fig. 1. Very clear explanations of these techniques are found in introductory texts like Lilienfeld and Lilienfeld[1], and Barker[2].

Fig. 1

**Main Approaches of Epidemiology**

**A: Observational Studies**

I. Descriptive ; Surveys — Cross-sectional; Longitudenal

II. Analytio : Studies — Prospective: Cause→effect; Retrospective: Cause←effect

**B. Experimental Studies**

I. Community trials

II. Clinical trials

This article attempts to identify some of the situations where these methods can be applied in research at the different levels in the Health Care System. Conceptually the approach to the Health services system can be portrayed by a simple diagram Fig. 2. This is elaborated in Fig. 3.

In Fig, 2, we note that the health services draw upon resources in response to certain health problems for the purpose of producing an output - in the form of improved health status, Health problems are identified in relation to the population at risk. Health resources constitute human, physical and financial components. Health problems and resources vary from place to place and from time to time, so that these components are priority areas foɹ research, to provide information for the planning and evaluation of the services.

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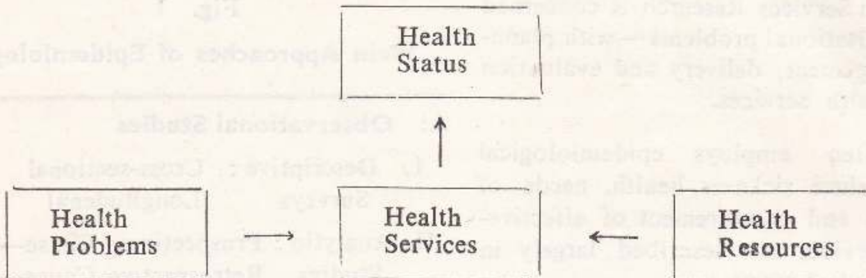
Fig. 2

**Health Care System Overview (Reinke[3])**




Health planning can be considered effective only to the extent that it produces a greater contribution to health status per unit of resources expended than would have been achieved in the absence of planning[3].

**Community Studies**

As stated earlier, problems relate to the population in the community. This involves demographic, socio - economic, and epidemiological factors - the last concerning morbidity, mortality and disability-within geographic boundaries (Fig. 3). A broad objective in the organization of the health services is to meet the 'needs' of the population and cater for their 'demand'. Need is to be understood mainly in terms of demonstrable disease requiring and amenable to some form of medical care. Surveys provide an adequate way of estimating 'needs'. Demand is usually measured by service utilisation. 'Needs' and 'demands' for health care may or may not coincide. Both demand and needs may take several forms. There are 'actual', 'planned' and 'desired' demands; as well as 'normative', 'felt', 'expressed' and 'comparative' needs. These depend on individual, sociological, cultural, economic and technological factors.

There are several indicat ors of the level of health and disease and these give an indication of the need of the community. the morbidity rates that are useful are:-

Prevalence rate for the leading causes of morbidity.

Incidence of diseases (persons and spells).

Relative frequency of the leading causes of morbidity.

Absenteeism from work because of illness.

Average duration of illness per ill person and per completed spell.

The indicators of mortality that are helpful are:-

Crude death rate.

Age / sex specific death rates.

Infant mortality rates - early neonatal, late neonatal, post-neonatal.

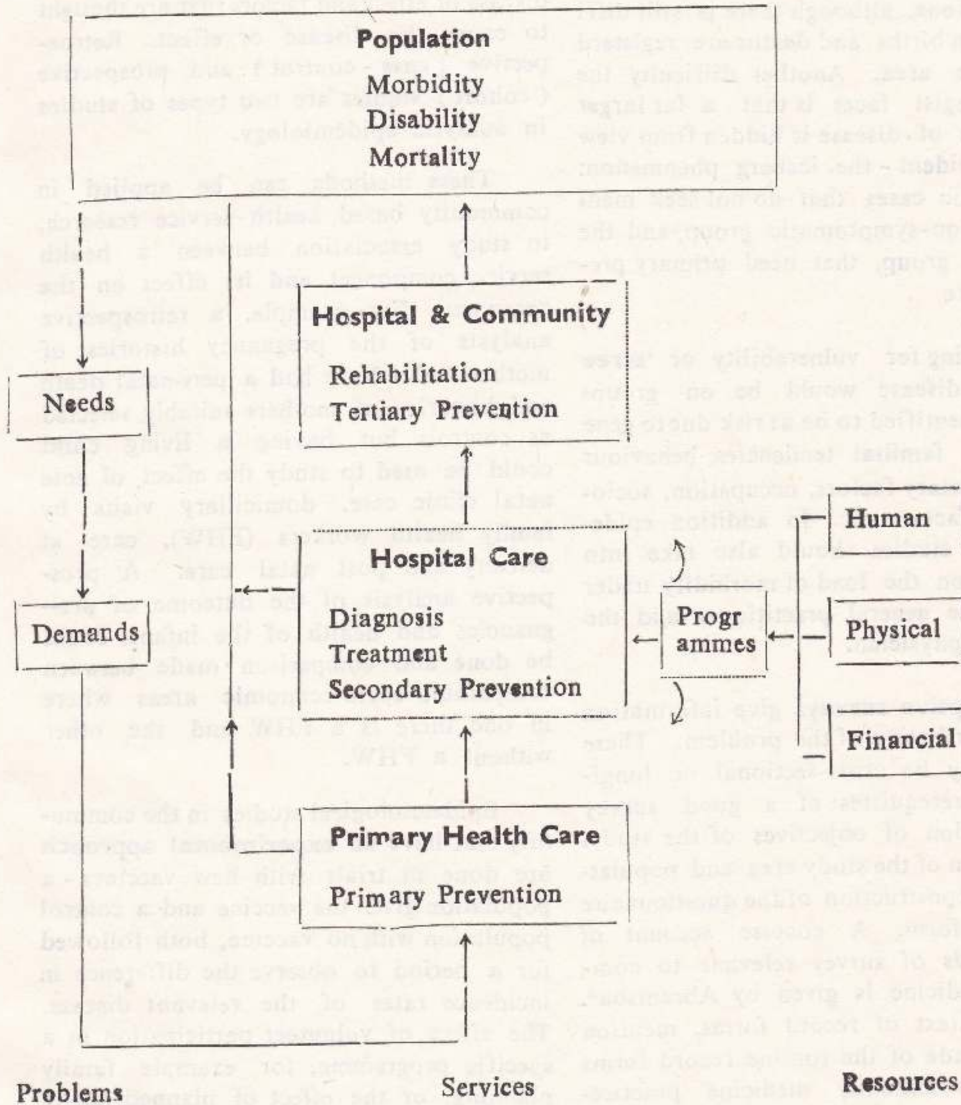
peri - natal mortality rate.

Maternal mortality rate.

Standardized mortality rates for different diseases.

Fig. 3

**Detailed view of health system. (adapted from Reinke [3].)**



All these rates are related to the population. In the field of community medicine, the tradition has been to have defined areas and populations for health care eg: PHM Areas, MOH Areas etc. As such it is possible to relate the indices to populations, although there is still diffi culty when births and deaths are registerd outside the area. Another difficulty the epidemiologist faces is that a far larger proportion of disease is hidden from view than is evident - the iceberg phenmenon: symptomatic cases that do not seek medi cal care, non-symptomatic group, and the vulnerable group, that need primary preveutive care.

Surveying for vulnerability or **'scree ning'** for disease would be on groups that are indentified to be at risk due to gene tic factors, familial tendencies, behaviour patterns, dietary factors, occupation, socio-economic factors etc. In addition epidemiological studies should also take into consideration the load of morbidity under care of the general practitioner and the ayurvedic physician.

**Descriptive surveys** give information on the distribution of the problem. These surveys may be cross-sectional or longitudinal. Prerequistes of a good survey are formation of objectives of the study, demarcation of the study area and population, and construction of the questionnaire or record form. A concise account of the methods of survey relevant to community medicine is given by Abramson[4]. In the context of record forms, mention must be made of the routine record forms used in community medicine practice-maternal and child health records, school medical inspection records, communicable diseases investigation forms etc. These records if properly filled could serve as providers of useful data for health service research.

The methods of **analytic epidemiology** are used in finding association between disease or effect and factors that are thought to cause the disease or effect. Retrospective ( case - control ) and prospective ( cohort ) studies are two types of studies in analytic epidemiology.

These methods can be applied in community based health service research, to study association between a health service component and its effect on the consumer. For example, a retrospective analysis of the pregnancy histories of mothers who have had a peri-natal death and histories of mothers suitably selected as controls but having a living child could be used to study the effect of ante natal clinic care, domiciliary visits by family health workers (FHW), care at delivery and post natal care. A prospective analysis of the outcome of pre--gnancies and health of the infants could be done and comparison made between comparable socio-economic areas where in one there is a FHW and the other without a FHW.

Epidemiological studies in the community that have an **experimental approach** are done in trials with new vaccines - a population given the vaccine and a control population with no vaccine, both followed for a period to observe the difference in incidence rates of the relevant disease. The effect of volunteer participation in a specific programme, for example family planning, or the effect of planned health education programmes on the health behaviour and health status can be studied using this experimental method.

**Hospital Studies**

Britain, (from whom we adopted many health care programmes and copied curricula for medical education) has been backward in medical care research. It embarked upon a National Health Service (NHS) in 1948 with little tradition of research in the field of medical care. Basic reconnaissance and planning for health services has tended to be done by committee of experts and informed laymen than by research teams[5].

The chief impediment to research in that country, and which is instructive to us, was the non availability of good data from hospitals. Systematic collection of hospital data came about only in early 1950 when NHS hospitals in England and Wales started providing data in I in 10 sample of discharges and deaths as part of the Hospital in - patient Inquiry (HIPE). One of the stated objectives of the HIPE was administrative-to provide information about the use of the hospital services in terms of age, sex, and other characteristics, and also of diseases and operations performed, for the purpose of central planning and to assist regional development and local supervision, Since late 1960s, a 100 percent sample of discharges and deaths are also analysed at a regional level - Hospital Activity Analysis (HAA). So that at present HIPE takes 10 pereent sample from HAA computer files[6]. H1PE and HAA have generated considerable data on a routine basis for research in Health Services.

In Sri Lanka, a lesson to be learnt from the British experience is that a pre-requisite for any serious research based on hospital care is data that is collected with a purpose. For research, it is advisable to systematically allocate I in 10 or even I in 20 patients on admission and enter their Bed Head Tickets with the caution a research study deserves. It is more profitable to analyse 1000 such B, H. T. s than 10,000 B. H. T. s, many of which may not even bear internationally acceptable diagnosis. In the context of community studies. it is said that no survey is better than its questionnaire. Likewise a hospital study is valued on the quality of the information in the B. H, Ts. This is as regards information that is routinely collected in clinical practice. Retrospective studies depend totally on such documents for their data on cases and controls. Prospective studies have the advantage the record form or B, H. T can be planned to record and code information specific for the study. As the end result of hospital care would be cure in some form or death, accurate diagnosis is important. Much of the information in our B. H. T. s and death certificates do not lend themselvs for research because diagnosis is not written according to the international classification of diseases [7], as a result even broad grouping of the diseases are not reliable.

There are two basic questions which might be asked in well collected hospital data. First is concerned with explaining why patients are admitted. The **descriptive method** of epidemiology is applied in this situation, and for any particular disease would give answers to the questions: who is admitted (persons), from where do they come (place), and when do they come (time). Second concerns work in the hospital and the cost (efficiency) and the effect of hospitalisation on patients admitted to the hospital and on the disease problem in the community (effectiveness). **Analytic methods** of epidemilogy can be adapted for such studies.

Fig. 3 shows the hospital component in the Health System as being concerned with secondary prevention, where proper diagnosis, effective treatment and specific health advice prevents a disease from going to a chronic stage. In most cases the patient is cured and returned to the community. If the disease progresses to the chronic stage, the hospital together with the community takes responsibility for rehabilitation - tertiary prevention.

Morbidity statistics gathered from the hospital component gives information for planning and evaluation of hospital services. It can also provide data for the study of morbidity in the community. For this purpose hospital data has two main disadvantages:

(1) The catchment area of the hospital is usually unknown or illdefined and therefore population based rates, such as incidence and prevalance, cannot be computed.

(2) The types of diseases are highly selective depending on the availability of services, the policy of hospitalization and habit of the people.

Recently the Jaffna Medical Journal [8] carried abstracts, articles and J. M. A. Presidential Address on studies, based on hospital records, giving patterns (and problems) of diseases, by the University Units of paediatrics, medicine and obstetrics and gynaecology; and by the surgical and dermatology Units of the general Hospital, Jaffna. These studies, perhaps for the first time, give the patient load imposed on the Jaffna General Hospital - analysed by types of illness, their complications and description of the patients. They serve to give preliminary and basic data which, as been pointed out in one of these studies, would 'identify factors that would influence the organisation of health services and medical education programmes'.

Extension of such studies using more elaborate epidemiological and statistical methods, and perhaps also concepts of operations research, would provide more information for effective and efficient health care delivery. Some examples of the useful indices that can be indentified by these studies are:

Catchment area and population covered by the hospital.

Factors that determine utilization of hospital.

Bed - population ratio by different illnesses and vulnerable groups of people.

Doctor - Nurse - patient ratio.

Duration of patient stay by age, sex, social class and medical condition.

Cost per patient.

Content of surgical activity.

Waiting time for elective Surgery, Eg. hernias, varicose veins and haemorrhoids.

Use of supporting technical staff.

Efficient use of para - medical staff.

Effectiveness of different methods of treatment and surgical procedures.

Use and abuse of drugs.

Referral and prescribing patterns.

Time and motion studies of OPD and Clinic patients.

Study of outcomes - death, disease and disability severity levels, discomfort and dissatisfaction.

Hospital service must be treated as a comprehensive service - its operation, development and evaluation must be co-ordinated with the community services and the services provided by lower grade hospitals like District Hospitals and Peripheral Units.

Epidemiology, being a community oriented science, can be effectively utilized in several aspects of such studies.

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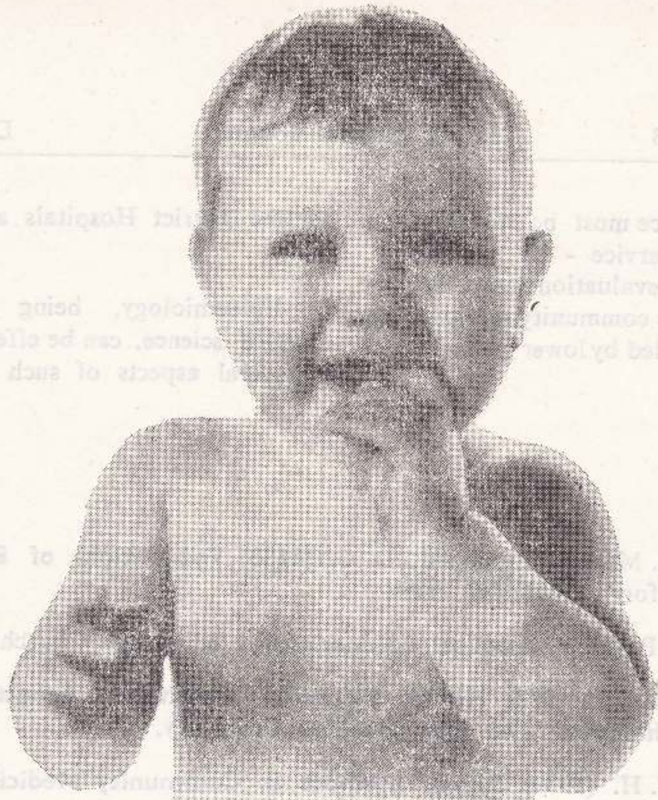

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# Meditation and Anxiety

**K. Mahadevan ***

**Summary**

*The State Trait Anxiety Inventory (STAI) was used to measure anxiety levels in undergraduates and psychiatric patients who enrolled for a course in the transcendental meditation (TM) technique. A control group of students also completed the questionnaire. After six weeks, anxiety levels in meditating students fell significantly, to a lower level than the control group. The patients showed a greater reduction in anxiety. A group of experienced meditators who had been practising TM for more than one year were found to have even lower scores. Meditation-relaxation techniques offer an alternative approach to anxiety management.*

**Introduction**

Stern (1974)[1] used the trait scale of the State Trait Anxiety Inventory (Spielberger 1970)[2] to measure anxiety levels in university students practising a simple meditation technique, the transcendental meditation (TM) technique. She compared university students enrolling for a TM course with those who had been practising TM for 6 months, and found that the latter had a significantly lower score. Davies (1974)[3] used the same questionnaire to test students before and after learning TM. A control group practised muscle relaxation. There was a significant drop in trait anxiety in meditators but not in the control group.

We wished to determine whether similar results could be obtained in our students, and in anxious patients as well as in healthy students.

**Method**

39 subjects were asked to complete the trait scale of the STAI before and six weeks after learning TM. This number included 5 patients with clinical anxiety, the other 34 being healthy undergraduates of Jaffna University. Only patients in whom TM was the sole therapy (for whatever reason) were included in the study.

A further group of 42 students who chose not to learn TM completed the STAI on one occasion acting as controls. As trait anxiety is a personality trait, and personality changes slowly if at all, it was considered sufficient for control subjects to complete the STAI on one occasion.

Finally 10 experienced meditators who had practised TM for at least one year completed the STAI during an advanced meeting for meditators.

**Results**

1. There was no significani difference in the anxiety levels of students who enrolled for TM (mean score 45.72) and those who did not (mean score 43.52) ($0{\cdot}5 > p > 0{\cdot}1$, t-test).

* *Senior Lecturer, Department of Psychiatry, Faculty of Medicine. University of Jaffna.*

2. The psychiatric patients (mean score 57.20) were, as expected significantly more anxious than the students (mean score for all students = 44.52) $0.01 > p > 0.001$, t-test).

3. For the 27 out of 39 meditating students (69%) who returned a second questionnaire there was a highly significant reduction in trait anxiety (from a mean score of 45.71 to 38.11) after 6 weeks ($p > 0.001$, t-test).

4. Despite their small number, the psychiatric patients showed an equally significant reduction in anxiety, the mean score falling from 57.20 to 44.20 ($p > 0.001$, t-test).

5. Experienced meditators practising TM for more than one year had significantly lower scores than new meditators (mean 29.00 compared to 38.11) ($0.01 > p > 0.001$, t-test).

**Discussion**

TM proved to be as effective in reducing trait anxiety in Sri Lankan undergraduates as in American sophomores. There was a highly significant fall in STAI scores in our students.

TM was equally effective in anxious patients, in clinical as well as in normal anxiety. Only patients in whom TM was the sole therapy were included in the study, and therefore the improvement may be attributed to TM. It should be noted however that TM is generally used as an adjunct to and not as a substitute for conventional therapy.

Finally, experienced meditators had significantly lower scores than new meditators. The anxiolytic effect of TM therefore appears to be cumulative over time.

The meditators were a self-selected group and presumably expected to benefit from TM: this may have influenced their questionnaire responses. Nevertheless it is rare for any psychological therapy to produce such marked changes in so short a time, and the very low anxiety levels of long-term meditators cannot simply be due to suggestion.

The significance of these findings is that meditation-relaxation techniques offer an alternative approach to the management of anxiety; and anxiety is one of the commonest psychological disorders. Meditation therapy may find particular application in Asian countries; where it is a traditional technology.

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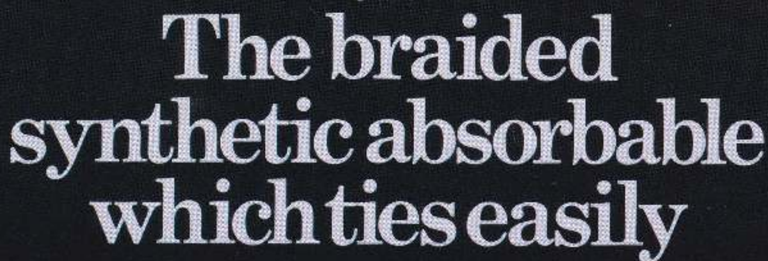


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# Abdominal Aortic Aneurysm*

R. Natkunam, FRCS.,[1] K. Palanivel, MBBS.,[2]

**Summary**

*A case of abdominal aortic aneurysm successfully resected is reported This patient, in addition, had a carcinoma of the gastric antrm which necessitated a partial gastrectomy.*

**Introduction**

In 1966 Charles Rob stated "today, the resection of an abdominal aortic aneurysm is a eommonplace procedure and one which several groups of surgeons have performed more than a thousand times".

Yet today (1973), we have not been able to find a single case report of a surgically treated aortic aneurysm in the Ceylon literature.

**Case Report**

K. F., a Tamil bachelor, aged 62 years, was admitted to the Thoracic Unit of the General Hospital, Jaffna with complaint of upper abdominal pain of two months duration. The pain was aching in nature and continuous. It radiated to the back and was not influenced by food. He gave no history suggestive of diabetes or cardiovascular disease.

Examination revealed a cheerful man who looked somewhat older than his age. He was anaemic and weighed 98 lbs; his blood pressure was 140/80 mm. Hg, and pulse 84 per min. and regular. There was no significant difference between the blood pressure in his upper and lower limbs and all his peripheral pulses were easily palpable.

In the abdomen, there was a spherical mass about 10 cm. in diameter centred somewhat above and to the left of the umbilicus. Its upper border extended up to the midpoint between the umbilicus and the xiphisternum whilst its lower extended to 4 cm. below the umbilicus. It showed expansile pulsation. No abnormalities were detected in the systems.

Results of the more significant laboratory investications were-Hb. 9·4 G%; ESR-72 mm:/ first hour; blood urea 26 mg. %; VDRL-non-reactive and blood group-O/Rh positive.

* *The article was submitted in 1973 but was lost / misplaeed. It was retrieved from old files accidentally and we decided to publish it in fairness to the authors, however outdated subject it may seem to be.*

1. *Surgeon, Thoracic Unit, Jaffna, Present post Surgeon, Thoracic Unit, General Hcspital, Colombo.*

2. *Senior House Officer, Thoracic Unit, Jaffna. Present whereabouts unknown.*

*Correspondence to : R. Natkunam.*

X'ray of the abdomen (Fig. 1) showed a curvilinear calcification about 12 cm. long, extending from L2 to L5, being about 3,5 cm. from the left border of L3 with some mottled calcification within its concavity. A lateral view of this region showed erosion of the anterior borders of the vertebral bodies from L2 to L5.

A diagnosis of abdominal aortic aneurysm was made and the patient prepared for surgery on April 11, 1973.

### Operation

A indwelling Foley catheter was established and 100 ml. of mannitol was commenced before the induction of general anaesthesia. A transverse incision about 5 cm. above the umbilicus extending from one flank to the other was employed to enter the peritoneal cavity.

### Operative Findings

a. Carcinoma of the antrum of the stomach penetrating into the pancreas with enlargement of the left gastric and pancreatic lymph nodes The liver was free of deposits. The tumour was technically resectable.

b. Aneurysm of the aorta (15 by 10cm.) situated below the renal vessels. extending down to the aortic bifurcation, The common iliac arteries were tortuous but not aneurysmal and their walls had palpable calcified plaques.

### Operative procedure

The aorta just below the renal vessels was exposed by division of the parietal peritoneum at the upper limit of the aneurysm and dissection continued until the inferior vena cava, the left renal vein and the left and right renal arteries were clearly visualised. After the left renal vein had been mobilised from the anterior surface of the aorta, a rubber tape was passed across the aorta proximal to the aneurysm. Traction on this permitted the safe application of a Satinsky clamp across the aorta at this point. The commcn iliac arteries were clamped 5 cm. beyond the aortic bifurcation aud 5000 units of heparin were injected into each artery distal to the clamp. A further 100 ml. of mannitol 20% was infused at this stage.

The aneurysmal sac was mobilised from below upwards with step by step ligation of each vessel leaving it, including the inferior mesenteric artery. The origin of the inferior vena cava inadvertently torn as the aneurysmal sac was being dissected away from its anterior surface was temporarily occluded by the finger and then repaired with 5/0 silk. The sac was then exc sed and a crimped bifurcated teflon graft was substituted for the aorta.

The proximal anastomosis was performed by everting mattress sutures followed by a second layer of over and over sutures, both of 3/0 silk. The distal anastomosis was carried out as an over and over suture using 5/0 silk. The blood flow to the left lower limb and then that to the right lower limb was restored as the respective distal anastomoses were completed. As the flow to the left lower limb was restored, the blood pressure dropped from a systolic of 120 mm. Hg. to 30 mm. Hg. It however quickly rose to 100 mm. Hg. following rapid blood

Fig. 1. Plain X'ray of the abdomen showing the curvilinear calcification in the wall of the aneurysm.

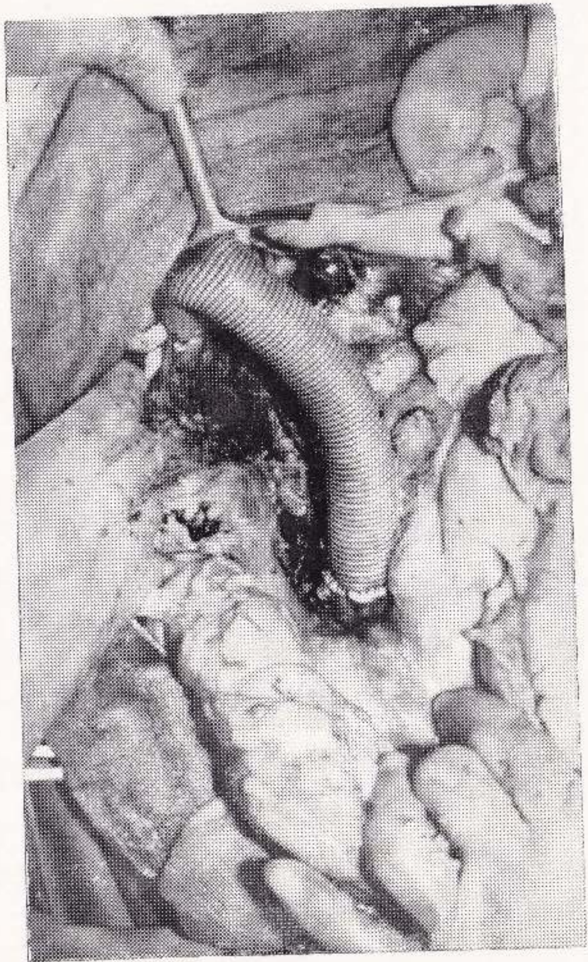

Fig 2. Photograph showing the crimped teflon graft soon after the anastomoses were completed.

transfusion, calcium gluconate and metaraminol. The time for which the aorta had been cross-clamped was I hour and 20 min.

The above procedure was followed by a Billroth I partial gastrectomy. Five pints of blood were transfused throughout the whole operative procedure. The urinary output for the entire period that the patient was in the theatre (6 hours) was a satisfactory 700 ml.

**Postoperative Period**

The immediate postoperative period was uneventful. On the tenth day however the patient developed a diarrhoea of 4 to 5 watery stools per day but without any abdominal pain. The stools did not at any time contain blood and the patients temperature and pulse remained within normal limits. Our initial anxiety as to whether there was impairment of blood supply to the colon was reassured by the fact that the diarrhoea settled quickly with symptomatic treatment.

The patient continued to remain in the ward for a considerable period owing to socio-economic reasons and did not leave till some 3 months after surgery when he had found accomodation in a Home for the Aged. At the time of discharge he was on a normal diet and the peripheral pulses in his lower limbs were easily palpable.

**Discussion**

Abdominal aortic aneurysms are almost always due to atherosclerosis (Moore and Wantz, 1961). Syphilis is now a rare cause and was excluded in this case by the negative VDRL. The diagnosis does not usually present any major problems. A mass in the upper abdomen exhibiting expansile pulsation is very characteristic. If at clinical examination, it is possible to insinuate the fingers between the upper border of the mass and the xiphisternum, then the aneurysm is located below the renal vessels this fortunately occurs in about 95% of cases (Rob, 1966). An aortogram is therefore not always an essential investigation.

The peak incidence of atherosclerotic aortic aneurysms has been stated to be between the 7th and 8th decades. We probably see fewer aneurysms in our country owing to the relatively shorter expectation of life as compared to Western countries. Surgical resection is limited by the availability of suitable prostheses. These facts are a probable explanation of the paucity of reports of surgical resection in Ceylon.

The presence of a large symptomatic aneurysm was the indication for surgery in our patient. The treatment of an asymptomatic aneurysm is a debatable one. Calne (1969) surmises that only 30 to 40 percent of those with symptomless aneurysms will die as a result of the lesion - hence he advises a period of observation. If there is evidence that the aneurysm is enlarging or if symptoms develop then elective surgery is advocated. He also recognises a critical diameter of 7 cm. for the aneurysm as the incidence of rupture in those over 7 cm. is high.

The woven teflon which we employed in this case was crimped, thus allowing the prosthesis to uncrimp with the force of blood pressure variations in the aorta once continuity has been restored. It is therefore important to judge the size and length of the graft with care to prevent

the production of a tortuous implant. We consider that in our case that the implanted graft was somewhat too long and ideally the proximal part of it should have been trimmed further.

The onset of diarrhoea postoperatively should alert the surgeon to the possibility of ischaemia of the distal colon. This is most likely to occur as a result of atheromatous or operative occlusion of the internal iliac arteries in a patient whose inferior mesenterie artery has undergone ligation (Eastcott, 1964). Renal shut down with severe postoperative oliguria may occur even though the renal arteries may not have been disturbed at the time of surgery (Rob, 1966.) Adequate hydration and the infusion of mannitol is believed to protect the kidney from such ischaemic damage (Calne, 1969).

Epigastric pain aggravated by food and anorexia are classical symptoms of carcinoma of the stomach in the aged. Our patient did complain of anorexia during his stay in hospital but its importance wes not appreciated as was the high ESR recorded on him on two separate occasions. Carcinoma of the stomach is a not uncommon lesion in Ceylon and its presence in our patient with an obvious abdomina aortic aneurysm was probably a fortituous one.

**Acknowledgements**

We wish to thank Dr. K. Jeevaratnam for his enthusiastic care of the patient during and after the operation and Dr. V. Sivagnanavel for heipful criticism of the script.

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# Depression in Thyrotoxicosis-A case report

T. Ganesvaran* MRC Psych., D. P. M. & N. Sreeharan+ M. D.. M. R. C. P., Ph. D

**Summary :**

*A case of hyperthyroidism presenting as an affective disorder 2½ years before the appearance of physical signs is reported. Affective and Schizophrenic psychosis due to hyperthyroidism are sometimes indistinguishable from the naturally occuring functional psychotic disorders. Current views on the subject are discussed.*

**Introduction :**

Psychotic precentation in thyrotoxicosis has been reported in up to 20 percent of cases[1]. Majority were depressed with hallucinations and delusions; and the psychosis appeared long before the symptoms of hyperthyoridism were observed[1]. The following case report illustrates this point.

**Case Report :**

Miss K. S., a teacher was first seen by a psychiatrist in one of the teaching hospitals of Sri Lanka at the age of 28. Little is known of this consultation apart from medication given whieh was trifluoperazine 5 mg twice daily with benzhexol 2mg daily. She was seen by one of us (T. G.) at the age of 30 in January 1983. On this occasion she complained of insomnia, loss of appetite and a sense of fear with difficulty in concentration. She had not had her menstrual periods for two months. By now she had enrolled to read for a degree in science at the University of Jaffna. There was no family history of mental illness. Physical examination revealed no abnormality. She was markedly agitated and apprehensive at interview. Hallucinations or delusions were not elicited in the current episode. Sensorium was unaffected. Diagnostic features of schizophrenia were notably absent. In view of the unmistakable depressed mood. a diagnosis of affective disorder was made. She was treated with Amitryptiline 50mg tds and benzhexol 2mg bd and was reviewed in two weeks. As the response was inadequate. a course of ECT was started. Symptoms remitted at the end of 6 ECTs and she continued with the same dose of Amitryptiline. Six months later she presented to us (N. S.) with a two week history of goitre. She now had tremors, exophthalmos, lid lag and tachycardia. Serum thyroxine of 13.5 ug / 100 ml confirmed the diagnosis of thyrotoxicosis.

**Discussion :**

Whether or not hyperthyroidism ean cause affective disorder is at present uncertain. Life time expectancy of developing an affective illness of any type ranges from 8 percent to 20 percent[2]. Since upto 20 percent of patients with thyrotoxicosis show psychotic symptoms[1], the probability of two relatively common illnesses occuring together by chance has

* *Senior Lecturer in Psychiatry,*

\+ *Professor of Medicine,*

*University of Jaffna, Thirunelvely, Sri Lanka.*

to be considered. Checkley[3] in 1978 reported that in a population of patients with recurrent manic depressive psychosis, eight observed episodes of hyperthyroidism occuring during normal health were not followed by any mental disturbance. However. Corn · and Checkley[4] in 1983 have reported upon a patient in whom two episodes of mania coincided with two episodes of hyperthyroidism. In this patient, the elevated serum thyroxine reverted to normal values when the mania was controlled with haloperidol. The above report by Corn and Cheekley emphasises the value of even a single case report providing new information and provoking new lines of investigation into suspected causal link between the two disorders. A single case of course, cannot lend itself to statistical analysis.

Our case illustrates several interesting features for further analysis-viz. the possibility of a link between thyrotoxicosis and manic depressive psychosis; the manifestation of the psychotic features long before the development of clinical thyrotoxicosis. The features of thyrotoxicosis which mimic anxiety neurosis are well known. However, the common association of psychotic features remain relatively unknown.

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# News and Notes

First batch of 25 members of our association donated blood on 22nd October 1983 and set an example to the public encouraging them to donate blood to save precious life.

* * *

The members of the J M A contributed Rs. 35,000/— to the Refugees' Fund for the rehabilitation of the refugees in the various camps.

* * *

J M A continues to provide medical service at these rufugee camps by its members visiting them atleast thrice a week.

* * *

Dr Yogu Pasupati MRCP (Lond) DCH has left us and gone to Australia in November. He rendered a great service to J M A in various capacities.

Vice-President of J M A from 21st May 1977 to 22nd November 1977, President from 23rd November 1977 to July 1978, a council member from July 1978 to June 1979 and as the first chairman, board of trustees from October 1980 till he left the country.

The J M A always remembers him for his valuable services.

* * *

There were ninety eight displaced doctors, forty six dental surgeons, one hundred and twenty seven registered medical practitioners, seventy two medical laboratory technologists, eighteen radiographers, one hundred and twenty five pharmacists, seven physiotherapists, eighteen nursing officers and eighteen other staff of the health department among the refugees who came to Jaffna during the recent disturbances in the country. Most of them repoited for work at the General Hospital, Jaffna and other institutions in the north.

* * *

After a long wait, the cobalt machine has been installed at the Base Hospital Tellipallai and four therapy radiographers have been appointed. But unfortunately the cancer patients have to wait for some more time till a physicist is appointed, to receive treatment.

* * *

Dr K Mahadevan, MRCPsych Senior Lecturer in Psychiarty and Dr M Jegasothy, MRCOG lecturer. in Obstetrics and Gynaecology have resigned from the University of Jaffna and gone abroad.

* * *

The Second Annual Sessions of the association will be held on 5th and 6th May 1984.

Abstracts of scientific papers should be sent to the Secretary, J M A, before 15th March 1984.

Full text of Dr V T Pasupati Memorial Lecture should be sent before 15th February 1984.

* * *

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