Conclusions

1. Erythema begins to appear after three hours and takes about 8 hours to develop fully.
2. Pigment begins to appear after a week and fades away gradually after a period of two or three months.
3.

	STR	Arc lamp	Hg. lamp
SE_1 was seen in	55.5%	65.5%	71.7%
SE_2 " " "	25.5%	34.2%	53.9%
SE_3 " " "	8.7%	2.0%	4.3%
SE_4 " " "	*Nil*	*Nil*	*Nil*
No skin reaction "	44.5%	34.5%	28.3%

4. The skin of tuberculous patients seems to be hypersensitive and that of patients suffering from rheumatism and allied conditions is hyposensitive.
5. The most sensitive age is between 21 and 30 years and the least sensitive between 1 and 10.
6. Accustoming can be carried up to 8 to 10 times if gradually and carefully done.
7.

	STR	Arc lamp	Hg. lamp
The mean of SE_1 in males	11.9	9.4	7.7
" " " SE_1 " females	12.1	9.0	7.1
" " " SE_1 " male children.	15.1	15.4	12.5
" " " SE_1 " female children.	12.1	15.2	13.8

In the solarium we get patients mostly from Jamnagar State, which has an area of about 4,000 square miles. The State is between latitudes 22.58°N. on the north and 21.43°N. on the south and between longitudes 69.11°E. on the west and 71.34°E. on the east.

Variations in sensibility according to sex

The sensitiveness of the skin of adult females is about 10 per cent less than that of the male adults in India, while in France it is the reverse. In the case of children in both the countries, the sensitiveness of female children is higher by 10 per cent.

External appearance of the skin is not a sure guide with regard to its sensibility. A dark skin may sometime show a higher sensitiveness than fair skin. The skin test therefore should always be resorted to.

The skin sensitometric tests taken on a large scale in the Institutes at Paris, Aix-les-Baines and Jamnagar, have revealed very interesting facts about the skin sensibility of individuals living in two entirely different climatic conditions.

The average time taken to produce various erythema reactions is :—

	France	India
SE_1 ..	3.5 minutes	7.0 minutes
SE_2 ..	7.0 "	11.6 "
SE_3 ..	10.0 "	15.1 "

Indians require at least 50 per cent more ultra-violet than Europeans to produce the same effects.

Variations in sensibility according to age

The following table gives the diminishing order of sensibility in France and India :—

	France	India
Most sensitive age ..	20–30	16–30
	31–50	31–50
	15–20	11–25
	50–70	50–70
Least sensitive ..	10–15	6–10
	2–4	

The sensibility is variable in infants under twelve months of age. It is least in the children up to ten and highest at between 16 and 30 years. Variations according to age are similar in both the countries.

Medical News

THE INDIAN HONOURS LIST

2ND JANUARY, 1941

THE following are the names of medical men, and others, associated with medical institutions, in the Indian Honours List of date 1st January, 1941. We offer them our congratulations.

K.C.I.E.

Major-General E. W. C. Bradfield, C.I.E., O.B.E., I.M.S., Medical Adviser to the Secretary of State for India, and lately Director-General, Indian Medical Service.

Knighthood

Brevet-Colonel R. N. Chopra, C.I.E., I.M.S. (retired), Professor of Pharmacology and Director, School of Tropical Medicine, Calcutta.

C.S.I.

Major-General H. C. Buckley, K.H.P., I.M.S., lately Surgeon-General with the Government of Bombay.

C.I.E.

Lieutenant-Colonel H. E. Shortt, I.M.S., Director, King Institute, Guindy, Madras.

Lieutenant-Colonel H. H. Elliot, M.B.E., M.C., I.M.S., Surgeon to His Excellency the Viceroy.

Lieutenant-Colonel D. Clyde, I.M.S., Civil Surgeon, Lucknow.

Lieutenant-Colonel W. H. Crichton, I.M.S., Chief Health Officer, Delhi.

C.B.E.

Ruth Young, M.B.E., Women's Medical Service, lately Principal, Lady Hardinge Medical College, Delhi.

O.B.E.

J. R. Haddow, Indian Veterinary Service, Veterinary Research Officer-in-charge of Serology, Izatnagar.

Lieutenant-Colonel S. N. Hayes, I.M.S., Professor of Midwifery, King Edward Medical College, Lahore, and

Medical Superintendent, Lady Willingdon Hospital, Lahore.

Lieutenant-Colonel G. D. Malhoutra, I.M.S., Civil Surgeon, Moradabad.

S. R. Moolgavkar, Esq., Professor of Surgery, Grant Medical College, and Honorary Surgeon, J. J. Hospital, Bombay.

Major M. Taylor, I.M.S., Superintendent, European Mental Hospital, Kanke, Ranchi.

M.B.E.

Dossibai Jehangir Ratenshaw Dadabhoy, Honorary Consulting Surgeon, Cama and Albless Hospitals, Bombay.

Miss Ursula Marie Lobo, Women's Medical Service, Junior Branch, Shegaon, Buldana District, Central Provinces and Berar.

F. Barretto, Assistant Director of Public Health, in charge of the Public Health Laboratory, Poona.

Honorary Captain Rai Bahadur N. N. Dutt, Medical Practitioner, Calcutta.

Major Sayad H. Shah, Punjab Civil Medical Service, Army in India Reserve of Officers, Superintendent, Old Central Jail, Multan.

Assistant Surgeon W. St. Alban Hendricks, Civil Surgeon, Gangtok.

A. J. Noronha, Esq., Lecturer in Bacteriology and Pathology, B. J. Medical School, Poona.

Assistant Surgeon A. J. Selvey, Acting Vice-Consul and Medical Officer, British Consulate General, Kashgar.

R. S. Tirodkar, Esq., Professor of Medicine, Grant Medical College, and Honorary Physician, J. J. Hospital, Bombay.

Kaisar-i-Hind Gold Medal

Miss Reba Cuthbert Hunsberger, Lady Doctor-in-charge, Memorial Hospital for Women and Children, Sialkot City.

Daisy Elizabeth Munro, M.B.E., Lady Superintendent, Civil Hospital, Karachi.

R. G. Cochrane, Medical Superintendent, Lady Willingdon Leper Settlement, Chingleput.

Lieutenant W. P. S. Mitchell, M.B.E., Indian Medical Department, Chief Medical Officer, Bastar State.

Lieutenant-Colonel J. L. D. Yule, Indian Medical Service, lately Officer Commanding, Indian Military Hospital, Delhi Cantonments.

Bar to the Kaisar-i-Hind Gold Medal

Mrs. Olive Monahan, Chief Medical Officer (retired), Kalyani Hospital, Madras.

Kaisar-i-Hind Silver Medal

Robina Margaret Gertrude Brown, General Secretary, Indian Red Cross Society, Bengal Provincial Branch, Calcutta.

Winifred Cole, Rajputana.

Miss Mabel Graham, Matron of the St. Columbus Hospital, Hazaribagh, and Superintendent of the Nurses' Training School attached to the Hospital, Bihar.

Miss Ethel Mary Hadow, Zenana Mission Hospital, Tank, N. W. F. P.

Miss Ada Racine Simmonds, Nursing Sister, Church Missionary Society Hospital for Women, Multan Cantonment, Punjab.

Rai Bahadur J. P. Gupta, Provincial Medical Service, Medical Officer-in-charge, Sadar Hospital, Aligarh.

Dr. A. M. Kerr, Medical Officer-in-charge of the Mission Hospital, Jalalpur Jattan, Tehsil and District Gujarat, Punjab.

Dr. V. C. Rambo, Doctor-in-charge, Mungeli Area Christian Hospital, Bilaspur.

The Reverend D. S. Savarkar, Honorary Superintendent and Treasurer, Kondhwa Leper Hospital, Poona.

Dr. S. N. Sen, Private Medical Practitioner, Jamalpur, Honorary Ophthalmic Surgeon to Monghyr Sadar Hospital, Bihar.

Dr. B. K. Sikand, lately Secretary, Tuberculosis Association of India, New Delhi.

Dr. The Reverend C. Wyder, Superintendent, Kothara Leper Asylum, Ellichpur Taluq, Amraoti, Central Provinces and Berar.

Bar to the Kaisar-i-Hind Silver Medal

Lucia Navamanie Veerasinghe Chinnappa, Assistant Directress of Public Health (Maternity and Child Welfare), Madras.

Miss Elizabeth McMaster, Principal Doctor of the Canadian Mission Hospital for Women, Indore.

The Reverend P. A. Penner, Superintendent, Bethesda Leper Home, Champa, Bilaspur District.

Kaisar-i-Hind Bronze Medal

Sister Marie Cecile, Matron, St. Teresa's Hospital for Women, Kurnool, Madras.

Dr. K. W. Advani, Medical Practitioner, Sind.

Dr. N. Angami, Sub-Assistant Surgeon, Kohima, Naga Hills.

Jemadar P. Singh, Indian Medical Department, Sub-Assistant Surgeon, King George's Royal Indian Military School, Jullundur.

Jemadar Syed R. Ahmad, Sub-Assistant Surgeon, Indian Medical Department, in charge British Consulate Hospital, Zabul, Iran.

Dr. N. B. Sen Gupta, Sub-Assistant Surgeon in charge of the Leper Asylum, Sylhet.

Dr. T. R. Tewari, Punjab Civil Medical Service, Assistant Surgeon, Punjab.

Khan Bahadur

Khan Sahib Shaikh Ghulam Muhammad, Assistant Inspector-General of Civil Hospitals, Punjab.

Khan Sahib Risaldar H. M. Suleman Bahadur, O.B.I., Indian Army Veterinary Corps (retired), Military Veterinary Hospital, Poona.

Rai Bahadur

Rai Sahib S. C. Ghosh, Honorary Surgeon, Medical College Hospitals, Calcutta.

Rai Sahib M. P. Mehray, in charge Khairabad Eye Hospital, Sitapur District.

Dr. R. N. Darbari, Medical Practitioner, Allahabad.

Dr. Lala G. D. Kapur, Clinical Assistant to the Professor of Surgery, King Edward Medical College, Lahore.

Rai Sahib N. Pal, Lecturer in Surgery, Prince of Wales Medical College, Patna.

Rai Sahib S. B. Dutta, Civil Surgeon, Saran, Chapra.

Dr. B. Sen Gupta, Civil Surgeon, Balasore.

Rao Bahadur

Dr. M. J. P. S. Pillai, Medical Superintendent, Barnard Institute of Radiology, Madras.

Dr. A. T. Nayudu, Assistant Director of Public Health, Madras.

Dr. R. A. Kalle, Civil Surgeon, Bijapur, Bombay.

Dr. R. C. Motwani, Professor of Anatomy, Grant Medical College, Bombay.

Dr. B. R. Chandorkar, Civil Surgeon, Bhandra, C. P.

Rao Sahib M. Ramaswamy, Honorary Secretary, Indian Red Cross Society, Bangalore City Branch, Mysore.

Shifa-ul-Mulk

Hakim A. Usmani, Member, Board of Indian Medicine, Allahabad.

Hakim M. H. Khan, Proprietor, Chashma-i-Hayat Pharmacy, Ajmer.

Vaidyaratna

Kaviraj P. Sinha, Superintendent, Ayurvedic College, and Professor of Pharmacy, Hindu University, Benares.

Khan Sahib

S. Zainalabadin, Esq., Civil Assistant Surgeon, Kyaiklat, Burma.

A. M. Naqui, Esq., State Surgeon, Barwani State, Central India.

Jemadar M. G. Ali, Indian Medical Department, Sub-Assistant Surgeon, His Excellency the Viceroy's Dispensary.

Rai Sahib

Dr. A. B. L. Mathur, Lecturer, Medical College, Agra.

Dr. J. L. Agarwala, Medical Officer-in-charge, Kalyan Eye Hospital, Khatauli, U. P.

Dr. G. Sahay, Assistant to the Civil Surgeon, Patna, Medical Officer-in-charge, Patna Police Hospital, and Lecturer in Medical Jurisprudence, Patna Medical College.

Dr. K. B. Sahay, Teacher of Pathology and Deputy Superintendent, Darbhanga Medical School, Laheria Sarai.

Dr. S. N. Mukharji, Private Medical Practitioner, Deoghar.

Dr. S. N. Malhotra, Chief Medical Officer and Sanitary Commissioner, Karauli State.

Pandit R. R. Shukla, Sub-Assistant Surgeon, Medical Department, Ajmer-Merwara.

Dr. A. B. Sen, Assistant Surgeon, A. B. Railway, Chittagong.

Rao Sahib

Dr. D. R. Annamalai, Civil Assistant Surgeon, King Institute, Guindy.

Dr. A. Y. Deshpande, Ellichpur, Amraoti District, C. P.

Dr. T. H. Trivedi, Pathologist, West Hospital, Rajkot Civil Station, Western India States Agency.

Dr. M. N. Vijaykar, Medical Superintendent, Antop Village, Port Trust, Bombay.

TUBERCULOSIS WORKERS' CONFERENCE

THIS year, as last year, the value of the conference was proved, not only by the papers read and the discussions which followed, but perhaps even more by the personal intercourse between the members coming from all parts of India, by the opportunity for sharing individual problems, and by the inspiration of the growing feeling that they were all banded together in one brotherhood in the campaign against tuberculosis in this country.

SUMMARY OF PAPERS AND DISCUSSIONS

'*The Progress of the Tuberculosis Association's Campaign against Tuberculosis in India*' by Lieut.-General G. G. Jolly

The paper summarized briefly the present stage in the campaign against tuberculosis in India, from the point of view of the central association, since February 1939, the date of the inauguration of the association. The establishing of contacts with provincial and state committees, with government and local authorities and with tuberculosis workers, was one of the first steps. General Jolly paid a tribute to the help of Lady Linlithgow in this respect. The tours of the medical commissioner had also been of the utmost value. Thirteen provincial and eleven state associations were now affiliated to the centre, and several more associations were in process of formation. There had been a rapid growth of tuberculosis institutions, but there was so far a lack of after-care. Of the two institutions to be run by the centre, the model clinic in New Delhi was complete, and the Kasauli sanatorium was being begun. Short courses of post-graduate training in tuberculosis for general practitioners had been held in Bombay, Calcutta and Madras; Madras had also begun a 5 months' diploma course in tuberculosis. The paper also touched on the training of tuberculosis health visitors, tuberculosis propaganda and the need of a good India tuberculosis film, and tuberculosis surveys. Organized home treatment had been suggested by the central committee as a policy practicable at the present stage of the development of the campaign treatment and in this the general practitioner had a prominent place.

Discussion

This ranged over a large number of subjects connected with various aspects of tuberculosis work in India. Foremost in the discussion was the place of private practitioners in the tuberculosis campaign; their co-operation was absolutely essential, but in order that this co-operation might be obtained it was necessary that doctors in charge of clinics should not be allowed private practice; the system of staffing clinics with honorary doctors was impracticable; the non-co-operation of private practitioners was in some case due to fear of losing their patients.

Another subject discussed was the necessity of co-operation between the public health department and tuberculosis workers, specially as improvement of housing and living standards had to have a place in the tuberculosis campaign.

The place of the central association also came up for discussion, specially as regards the help that it could afford in such work as the planning and advising about surveys, and the allotting of research to different institutions to avoid overlapping and duplication specially when funds were very limited.

Other subjects which found a place in the discussion were the training of tuberculosis workers, doctors and health visitors, and of medical students in tuberculosis; the question of what to do with soldiers discharged from the army as tuberculous; the need of after-care establishments; mobile instead of fixed dispensaries in some areas; the provision of isolation for the poor in organized home treatment.

Several speakers dealt with legislation as regards notification with a view to checking spread of infection, but some thought this too early at the present stage of the campaign in India.

Tuberculosis Surveys

(*a*) Paper by Dr. R. B. Lal

The tuberculosis survey is an investigation into the social and other factors determining the peculiar distributions of the disease in the community and their trends and also into the potential forces which aid or combat the dissemination of the disease and determine its types. Only on the basis of the results of a survey so defined can a campaign best suited to the community be devised in a rational manner. The paper then dealt with some of the general principles in the methods of approach in pursuit of the objects of a survey and some of the general principles of practical importance in the planning and execution of survey so necessary if the effort of the survey is not to be largely wasted.

(*b*) Paper by Dr. P. V. Benjamin

The main purpose of tuberculosis surveys is the gathering of knowledge which can be used for the prevention of the disease. In the process of a complete survey there are several stages which are: type I survey for ascertaining the distribution of tuberculous infection in a particular community or area; type II survey including also extent of morbidity and mortality, extent of contact infection and the forms and types of disease; type III survey for investigating the factors which influence infection, morbidity and mortality. Each of these surveys was described and illustrated from such surveys made in S. India by the speaker and his colleagues. He then summed up the experiences and lessons gained from these surveys; definite knowledge about tuberculosis in these areas had been acquired and this could be used for gaining public co-operation in the campaign; the well-to-do are infected as much as the poor; except in a type I survey, a clinic is necessary for taking care of detected cases and thereby helping to sustain public interest and co-operation; a survey must be made to search for infective cases not coming to a clinic; for some for whom home treatment is impossible, a simple form of isolation will be necessary outside the home.

Discussion

There was stressed the necessity of surveys being carried out by well-trained workers, the type of test to be used—von Pirquet or Mantoux—the comparative value of fluoroscopy and radiography and the use of miniature films in surveys, the need for surveys being based on well-established institutions, and the need for help from the central association in advising, planning and assessing surveys, were all brought out in the discussion.

The second day of the conference was taken up with the subject of the influence of environmental factors on tuberculosis.

'The Influence on the Incidence of Tuberculosis by By-laws concerning Buildings, Town Planning, Slum Clearance and Lodging Houses' by Lala Shri Ram, Vice-chairman of the Tuberculosis Association

Municipalities when first constituted had to face only a few simple problems, such as providing a water-supply, lighting and indispensable sanitary services, but now they were faced with the great responsibility of safeguarding and improving public health in their areas. Housing conditions had to be regulated; new buildings could be regulated by building by-laws, but old buildings could only be dealt with by a town improvement scheme. Even where building regulations existed, a popularly elected body often found great difficulty in enforcing them and contraventions were frequently condoned. The town councils should lay down the policy, and the executive staff should then be held responsible for any breaches that occurred. The financing of improvement schemes to open up slums and remove sources of infection was not easy. Under the scheduled tax rules, municipalities had been allotted a few specific items of taxation when the needs were few and primitive, but a revision of tax allocation was now necessary. Town improvement schemes and the developing of a civic conscience by propaganda would all help in the reduction of tuberculosis.

'The Influence of Environment on the Incidence of Tuberculosis' by Lieut.-Colonel E. Cotter

The general features of the epidemiology of tuberculosis have long been known and the factors influencing its incidence can be summed up under nutrition, housing and education. After illustrating the influence of these three factors mainly from investigations in Europe, the paper went on to deal with some constructive suggestions as to what could be done in India. As regards nutrition, the results of researches under the Indian Research Fund Association had now to be applied to the general population by provincial and state authorities in which agricultural and health authorities co-operate. As regards housing, cities, small towns and villages had their different problems; the Delhi improvement trust scheme financed by the proceeds of the entertainment tax was a good example of what could be done in a city; a simpler plan was required in rural areas, the Nazafgarh scheme being an example of this. As regards education, it was hoped that the report of a special committee on health education in schools under the Central Advisory Board on Health, would be of value when it is published.

Discussion

A full discussion followed in which not only tuberculosis workers took part but also representatives of public health departments, municipalities, the army and railways. A full description of the Delhi improvement trust scheme was given by the chairman of the trust. Among the points brought out in the discussion were: the necessity not just for slum clearance, but for re-housing those removed from the slums; the problems caused by the drift of population from the country to the town; the main danger is the infectious case plus local overcrowding and therefore case-finding cannot be neglected; the need for a much wider co-operation between public health, medical and educational departments; education needed for both provincial and local authorities in matters concerned with the spread of tuberculosis; the need for health officers to have power with regard to sanctioning new buildings. The neglect of housing for domestic servants, the influence of purdah, that overcrowding is not always associated with poverty, were also mentioned.

General Jolly, in summing up the day's discussion, said it had been exceedingly productive and exceedingly interesting. The improvement trust system was not new, but the application of a luxury tax to pay for housing the poor was a new idea. Enforcement of by-laws was a crucial point and to ensure this a scheme similar to that in Burma was suggested in which—

(1) There was security of tenure for the health officer.
(2) Local authorities had responsibilities and not merely powers to make by-laws for buildings, which had to be submitted to the local government, *i.e.*, the passing of acceptable by-laws was mandatory, not permissive.
(3) It was the duty of the health officer to enforce the by-laws dealing with public health passed by the municipality.

The remaining day and a half of the conference were occupied with technical papers.

'Classification of Pulmonary Tuberculosis on Admission and Discharge' by Dr. C. Frimodt-Möller

In a very brief paper the report of the sub-committee on the classification of pulmonary tuberculosis appointed by the Tuberculosis Association was introduced and was further explained by Dr. P. V. Benjamin.

Discussion

Suggestions were made for a system of marks for different criteria taken in assessing stages, but the difficulties of doing this in the present stage of our knowledge and in the present stage of tuberculosis work in India, were brought out. The question whether the pathological type of the lesion should be taken into consideration as well as the anatomical extent of the disease was discussed. The necessity of *x*-ray examination for a satisfactory classification was well emphasized. In 'discharge' results there was discussion about the classifications of 'arrested', 'much improved' and 'improved', and an additional classification of 'quiescent' was suggested.

'Hæmoptysis' by Dr. K. Vasudeva Rao

After stating that in a series of 3,082 cases treated in Madras, 38.6 per cent had hæmoptysis of which only 9.4 per cent were severe, the paper dealt with the causation of hæmoptysis, the classification of hæmoptysis, the time of onset, seasonal variations, epidemic form, and age and sex influence. Prognosis and general management and a review of the methods used to control bleeding, medical and surgical, concluded the paper.

Discussion

In a short discussion the comparative rarity of deaths from hæmoptysis was mentioned by some speakers. A doubt was expressed as to the value of the many drugs advocated for hæmoptysis. Seasonal variation had also been noted by several.

'Interpretation of X-ray Films in Pulmonary Tuberculosis' by Dr. A. C. Ukil

The paper emphasized the necessity for proper exposure and developing of *x*-ray films if a reliable interpretation is to be made. In examining a film the following points had to be borne in mind:—

(1) The general appearance of tissues and organs in the thorax.
(2) The localization of the shadows.
(3) The character of the shadows, both in general and from the point of view of tuberculosis.
(4) The character of striation in the lung fields.
(5) Deficiency of the normal shadow and its localization and character.
(6) Differential diagnosis.

After the paper a number of *x*-ray films were demonstrated to illustrate the paper.

'Tuberculosis and Diabetes' by Dr. R. B. Billimoria

The paper dealt with the pathology of tuberculosis associated with diabetes and gave a short outline of the treatment to be adopted both for the diabetes and the tuberculosis, treatment of both being equally important.

'Intestinal Tuberculosis in its Medical Aspects' by Dr. R. Viswanathan

The paper began with a statement of the frequency of intestinal tuberculosis as a complication of pulmonary

tuberculosis seen at Vizagapatam and then dealt with the pathological anatomy of the condition and reviewed the treatments advocated. Some pathological specimens and lantern slides were shown at the end of the paper.

'Abdominal Tuberculosis in its Surgical Aspects' by Lieut.-Colonel F. J. Anderson

The speaker considered not only intestinal tuberculosis but also other forms of abdominal tuberculosis and spoke of the types of operation he had found of benefit.

Discussion

There was a difference of opinion as to whether intestinal tuberculosis was to be treated primarily medically or surgically, but probably no clear-cut division could be made and some cases must be treated surgically and some benefited best by medical treatment. Some speakers dealt with treatment by pneumo-peritoneum with or without a preliminary incision through the abdominal wall. The frequency of intestinal tuberculosis was commented on by several, both as a primary and a secondary manifestation. The difficulty of differential diagnosis was also mentioned and caution in the interpretation of *x*-ray films after barium meal was urged.

This year the conference was noted for the keenness and high level of the discussions which followed the papers, and the large number of speakers who took part.

Resolution passed by the committee of experts appointed by The Tuberculosis Association of India in regard to general conditions which should govern the selection of sites for tuberculosis clinics

(1) 'What considerations should govern the selection of sites for tuberculosis clinics?'

The site for a tuberculosis clinic should be selected with a view to its being of the greatest help to the population which it is intended to serve. This will be in, or as close as possible to, the most thickly populated area of the locality.

(2) 'Is it necessary to require any conditions to be satisfied by sites in or near populated areas in respect of either distance from inhabited houses or any other matter as a precaution against the spread of infection?'

No conditions need be laid down with regard to the distance of a clinic from inhabited houses in or near a populated area if the clinic is properly conducted. If a section of a building which is used for other purposes is selected for a clinic, the clinic should have its own separate entrance.

THE INDIAN CHEMICAL MANUFACTURERS' ASSOCIATION, CALCUTTA

THE necessity of according to the manufacturers of chemical and pharmaceutical products the facility to have a clinical trial of their products in the hospitals under the control of Government and local bodies, has been stressed in the course of a communication addressed by the Indian Chemical Manufacturers' Association to all the provincial Governments and major Indian States. It is pointed out that this facility is available in foreign countries and it has helped to obtain for the products manufactured in those countries the proper markets, whereas the absence of this facility in India forms one of the greatest handicaps to the industry. Recently the Medical Research Association in the U.K. in conjunction with Government departments and the Association of British Manufacturers arranged clinical trials of several important synthetic remedies previously obtained from abroad but now being manufactured in Great Britain, in order to ensure that these drugs of British manufacture were equivalent to the corresponding imported products. The Chemical Association states that several drugs and proprietary remedies identical to those coming from Germany and other foreign countries are now being manufactured in India and the manufacturers are in a position to prepare many more also, but the absence of the facility of clinical test makes it difficult to convince the medical profession and the buyers about the products of Indian manufacture being equally as efficacious as the corresponding foreign medicines, which are looked upon as standard. The facility of clinical trial in India would make it possible for many foreign medicines to be replaced by indigenous ones thus helping the chemical and pharmaceutical industry in this country.

THE INDIAN CHEMICAL MANUFACTURERS' ASSOCIATION, CALCUTTA

As a result of the efforts of the Indian Chemical Manufacturers' Association, Calcutta, the Government of India have decided to exempt benzol used in the manufacture of medicinal preparations from excise duty. The Government of India levied an excise duty of As. 10 per gallon (subsequently increased to As. 12) on benzol on the ground that it can be used as motor spirit as a substitute for petrol. The Indian Chemical Manufacturers' Association had pointed out to the Government that benzol was used as a solvent in the manufacture of alkaloid preparations but on account of the excise duty the alkaloids prepared in India could not stand in competition with the imported alkaloids in normal times. The step now taken by the Government of India would enable utilization of a large quantity of benzol manufactured in coke oven plants which was till now going to waste. It would also give an impetus to the manufacture of alkaloid preparations in this country.

ABSTRACT OF THE MINUTES OF THE BENGAL COUNCIL OF MEDICAL REGISTRATION, DATED 16TH FEBRUARY, 1940

1. THE Council had at their meeting of 8th August, 1939, adopted a resolution that it was desirable that the country of qualification, particularly when the qualification had been obtained from a foreign country, should be mentioned along with the abbreviation used for medical degrees, so that the public might not be misled: and expressed hope that a convention would be gradually established by registered medical practitioners, if they followed this practice.

The question whether this should be included in the Penal and Ethical Rules was considered at the meeting of 16th February, 1940: and it was decided that though desirable this could not or need not be included in these rules.

2. On a reference made to the Council on the question as to the propriety or otherwise of supplying personal history of patients in a hospital, such as one for tuberculosis, to life insurance companies, the Council observed that Rule 19 in Part III of the Council's Penal and Ethical Rules was clear enough on the subject and that it would not be proper for the authorities of such hospital to supply personal history of patients treated therein to such companies. The rule is as below:—

'A medical practitioner is under an obligation to his patient to preserve his secrets and in legal matters should, except with the patient's consent, answer questions only at the express direction of the Judge or Magistrate presiding in a court of law. A medical practitioner is not bound to answer questions put to him by policemen except as provided in section 44 of the Criminal Procedure Code.'

3. The Council noticed with regret that an amendment of the Bengal Medical Act, on the lines suggested by the Council from time to time, had not yet been taken up by the Government. They also desired to impress upon Government the necessity of improving the standard of Licentiateship course, by raising the

preliminary qualification to I.Sc., and extending the period from 4 years to 5 years.

4. The Council also resolved that the departments of the Government of India such as the posts and telegraphs, income-tax, etc., should be requested to follow the Government of Bengal Circular No. 2556 dated the 8th September, 1921, which lays down that when a medical certificate has been given to a non-gazetted officer by a registered practitioner, no further examination by the civil surgeon or a higher medical officer should be required unless the genuineness or veracity of the certificate was doubted.

ABSTRACT OF THE MINUTES OF THE BENGAL COUNCIL OF MEDICAL REGISTRATION, DATED THE 13TH AUGUST, 1940

1. THE Council repeated their recommendation that with a view to restraining quack practice, all dispensaries should be licensed and no dispensary should dispense any preparation which is not signed by a practitioner possessing registrable qualification.

2. The Council repeated their recommendation for suitable measures forbidding the use of the prefix 'Dr.' as a medical qualification except by persons possessing registrable qualifications.

3. On the question of propriety of registered practitioners being directors of firms manufacturing medicines, the Council adopted the following resolution:—

'That this Council would not object to the mere association of medical practitioners with firms of manufacturing medicines, whether as directors or shareholders, but the names of such medical practitioners should not appear in any publication (such as catalogue of prices or advertisements) circulated to the general public by the firm or its agents.'

4. The Council amended their Ethical Rule 8 as follows:—

'When a medical practitioner is asked to see and report on a case of illness or injury of a person who is under the care of another registered practitioner or about whom the latter has already given a medical certificate, the former should in all cases give the latter an opportunity to be present at the time of examination, if he so liked: and for this purpose he should direct the patient to inform the latter practitioner in sufficient time.

The medical practitioner when so seeing or reporting on a case, shall not interfere with the treatment nor make any disparaging remarks about the first diagnosis and treatment, even though he might differ.'

5. Certain cases of medical certificates being given by practitioners without sufficient care were reported and the practitioners were warned by the Council.

6. On the question of registered practitioners teaching medical subjects in Ayurvedic institutions, the following resolution was adopted qualifying section 3, Part I of the Ethical Rules:—

'This section does not apply so as to restrict the teaching of pre-clinical subjects such as anatomy and physiology by registered practitioners, in institutions recognized by the Ayurvedic State Medical Faculty of Bengal.'

7. The Council decided to add a chapter at the end of the *Annual Medical List* giving a list for the general information of all practitioners showing references to various provisions in the law which impose certain legal obligations on them and penalties for default.

APPENDIX TO THE PROCEEDINGS OF THE PENAL AND ETHICAL CASES COMMITTEE, DATED THE 22ND JULY, 1940 (ITEM 5). PART IV

Some legal matters of general information for medical practitioners

1. *Calcutta Municipal Act,* 1923 (*as amended*)

Section 435: Every medical practitioner who, in the course of his practice, becomes cognizant of the existence of any dangerous disease in any private or public dwelling-house, other than a public hospital, shall give information of the same with the least practicable delay to the health officer in such form and with such details as the health officer may, from time to time, require.

'Dangerous disease' means—

(*a*) cholera, plague, smallpox, cerebro-spinal meningitis and diphtheria; and

(*b*) any other epidemic, endemic or infectious disease which the local government may, by notification in the *Calcutta Gazette,* declare to be a dangerous disease for the purpose of this Act.

Penalty for default, fine Rs. 50

Section 453: Any medical practitioner in attendance during the last illness of any person dying in Calcutta shall, within three days of his becoming cognizant in the course of such attendance of the death of such person, send a written notice to the health officer, as nearly as may be in the form prescribed in Schedule XXII, stating, to the best of his judgment, the cause of death.

Penalty for default, fine Rs. 50

2. *Bengal Municipal Act,* 1932

Section 377: A medical practitioner or a person practising the medical profession, and in the course of such practice becoming cognizant of the existence of any dangerous disease in any building other than a public hospital . . . shall give true and correct information to such officer as the commissioner may direct, respecting the existence of such disease.

Penalty for default, fine Rs. 50

Section 447: Whenever a birth or death occurs in any hospital within the limits of any municipality in respect of which the local government has directed that all births and deaths shall be registered under the Bengal Births and Deaths Registration Act, 1873, it shall be the duty of the medical officer in charge of such hospital forthwith to send a notice in writing of the occurrence of such birth or death to the commissioners in such form as the local government may prescribe, and in such case no other person shall be required to give information of such birth or death to a registrar under the said Act or to a sub-registrar under this Act.

Penalty for default, fine Rs. 50

3. *Bengal Vaccination Act,* 1880

Section 5: If any . . . medical practitioner shall be of opinion that any child is not in a fit state to be vaccinated, he shall forthwith deliver to the parent or guardian of such a certificate under his hand according to the form of Schedule A hereto annexed or to the like effect, that the child is then in a state unfit for vaccination.

Section 6: If any . . . medical practitioner finds—

(*a*) that a child brought for vaccination has already had smallpox, or

(*b*) that a child who has been three times unsuccessfully vaccinated is insusceptible of successful vaccination,

he shall deliver to the parent or guardian of such child a certificate under his hand, according to the form in Schedule B hereto annexed, or to the like effect.

Penalty for not giving certificate Rs. 50; for giving false certificate, up to 6 months' imprisonment and fine Rs. 100 (section 28)

4. *Dangerous Drugs Act,* 1920

A medical practitioner possessing or selling medicinal opium or of any preparation containing morphine, diacetyl-morphine, or cocaine, in contravention of the Government rules prescribing the limits.

Penalty up to 2 years' imprisonment and fine

5. *Poisons Act,* 1919

Contravening the Rules under the Poisons Act.

Penalty up to 3 months' imprisonment and fine Rs. 500

6. *Bengal Excise Act*

Section 18: Possession of any intoxicant which has not been obtained from a licensed vendor . . .

['Intoxicant' means the leaves, small stalks and flowering tops of Indian hemp plant (*Caralis sativa* L.) including *bhang*, siddhi or ganja: charas: any mixture with or without neutral materials, if any of the above forms of intoxicating drug or drink made therefrom: and any other intoxicating or narcoting substance or any fermenting against which the provincial Government may specify as 'intoxicant'.]

Penalty up to 6 months' imprisonment and fine Rs. 1,000

Section 53: If any chemist, druggist, apothecary or keepers of a dispensary allows any intoxicant which has not been *bona fide* medicated for medicinal purposes, to be consumed in his business premises by any person not employed in his business.

Penalty up to 3 months' imprisonment and fine up to Rs. 1,000

7. *Indian Port Health Rules,* 1938 (*Under the Indian Ports Acts,* 1908)

Rule 8: 'Every medical practitioner, who becomes cognizant that any passenger on board or any member of the crew or any person employed on board any vessel in the port is suffering from any of the diseases specified in rule 3, shall immediately give notice thereof by telephone and in writing to the Health Officer.'

(The diseases specified in rule 3 are plague, cholera, yellow fever, typhus, smallpox, chickenpox, cerebro-spinal meningitis, diphtheria, relapsing fever, jigger, and influenzal pneumonia.)

Penalty for omission, fine up to Rs. 1,000 [section 6(3)]

8. *Indian Penal Code*

Section 269: Whoever unlawfully or negligently does any act which is, and which he knows or has reason to believe to be likely to spread the infection of any disease dangerous to life.

Punishment up to 6 months' imprisonment and fine

Section 274: Adulteration of drug or medicinal preparation.

Penalty up to 6 months' imprisonment and fine Rs. 1,000

Section 275: Selling or offering for sale the same.

Penalty up to 6 months' imprisonment and fine Rs. 2,000

Section 276: Whoever knowingly sells or offers or exposes for sale or issue from a dispensary for medicinal purpose any drug or medicinal preparation, as a different drug or medicinal preparation.

Penalty up to 6 months' imprisonment and fine Rs. 1,000

Section 284: Whoever does, with any poisonous substance, any act in a manner so rash or negligent as to endanger human life, or to be likely to cause hurt or injury to any person; or knowingly or negligently omits to take such order with any poisonous substance in his possession as is sufficient to guard against probable danger to human life for such poisonous substance.

Penalty up to 6 months' imprisonment and fine Rs. 1,000

INDIAN JOURNAL OF OPHTHALMOLOGY

WE have now received the second number of this journal. There was room for a specialist journal on this subject in India and we welcome its publication.

The articles are interesting, particularly one long historical paper on cataract.

The format of the journal is good, and the proof reading has obviously been done carefully; however most of the references are not given in a traceable form, the year only being mentioned in some cases.

We wish the journal the success that the enterprise of its promoters deserves.

Current Topics

Antiseptic Analgesic Tannic-Acid Jelly for Burns

By J. F. HEGGIE

and

R. M. HEGGIE

(From the *Lancet,* Vol. II, 28th September, 1940, p. 391)

WHEN we were considering the use of an antiseptic tannic-acid jelly for burns in H. M. ships, in which bottles of tannic-acid solution might readily be broken in action at dressing-stations, Prof. W. C. Wilson of Aberdeen told us that he had had prepared for him in the dispensary at Edinburgh Royal Infirmary a jelly consisting of acriflavine 0.1 per cent and tannic acid 20 per cent with a glycerine-tragacanth base.

We prepared a similar jelly with proflavine sulphate 0.1 per cent, and, having regard to the use of Nikalgin for burns in the last war, we considered the addition of an analgesic. Tannic acid precipitates alkaloids from solution, but its effect in a jelly was considered to be less rapid; so quinine and urea hydrochloride 0.5 per cent were added. Slow precipitation took place, and chlorbutol 2 per cent and procaine 2 per cent were substituted in separate preparations. Chlorbutol gave very little relief. Procaine gave relief lasting about an hour and has been used more frequently.

Since in the great majority of infected burns reaching this hospital the predominating organism was *Staphylococcus pyogenes aureus,* the jelly was also made up with methyl violet 0.1 per cent instead of proflavine sulphate. Our observations on the organisms normally present on the skin of naval ratings have proved that pyogenic staphylococci are commonly found.

The formula for the jelly is as follows:—

Tannic acid	.. ..	20.0 per cent.
Proflavine sulphate	..	0.1 „
Procaine	.. ..	2.0 „

in glycerine-tragacanth base.

Methyl violet may be substituted for proflavine sulphate. The glycerine-tragacanth base consists of:

Pulv. tragacanthæ co.	..	2.0 per cent.
Glycerine	.. ..	10.0 „
Distilled water	.. ..	ad 100 „

The preparation is put up in collapsible tubes or, in hospital, stored in wide-necked well-stoppered bottles.

APPLICATION

On unbroken skin.—When the skin is erythematous and blisters have formed, the jelly is smeared fairly liberally over the affected area and well over the margin on to healthy skin. Two thicknesses of gauze are then applied intimately, another two are added, and with a thickness of wool the whole is bandaged and left for about a week. This was the routine adopted in the cases we have treated personally.

On the removal of the dressing at the end of a week the consistence of the jelly had altered according to