

The Bulletin

OF THE

South Indian Medical Union.

12 MAY 1930

Vol. II.

APRIL 1930.

No. 4.

MADRAS MEDICAL COUNCIL ELECTIONS.

Vote for Part I. Dr. V. D. Nimbkar.

II. „ S. Rangachari,

III. „ U. Rama Rao.

GENERAL NOTES.

Probably by this time the voting papers for the election to the Madras Medical Council would have been issued. At a time when the affairs *Medicale* are leaving their purely scientific aspect and are getting tinged with a political colour it would be in the interests of all concerned if there is a strong representation of members of

the Independent Medical Profession in the Council. A prominent member of the Madras Medical Service remarked that 'he' has been all along of the opinion that there should be a stronger representation of the private medical practitioners in the Council. We are sure, that with the Head of the Services as the President of the Council it would be highly desirable to have a large number of the independent profession

to help him. In each of the three groups for which election is being held, a member of the Union is standing as a candidate. Dr. V. D. Nimbkar stands for Part I. He has been representing that group the last 5 years. Dr. S. Rangachari, M.B., C.M., President of the South Indian Medical Union, stands for Part II. As a retired Senior Member of the Madras Medical Service and as a leading practitioner now, we need not repeat that the interests of both the service and non-service members of the profession would be adequately safeguarded. Dr. U. Rama Rao (Vice-President) needs no introduction. A champion of the wronged and one who has spent the major part of his life in fighting the evils which have kept down the Medical Profession in India he is sure to be a tower of strength in the Council.

We heartily commend the above for your support and request that you will not only give your personal vote but also interest yourself in returning them to the Council.

* * *

The inter-universities conference would be soon meeting at Bombay. We hear that one of the points to be discussed is the formation of an advisory body to function as the Indian Medical Council till such is established. We cannot understand the propriety of the Universities in detailing a body from amongst themselves to inspect and control medical standards. Mutual regard and admiration are good qualities but sometimes might not be beneficial in their function when it comes to checking standards and removing abuses. After all, whilst the Universities have every right to fix the standards required for their degrees, the persons who have to prescribe the minimum standards of Medical Education and inspect the Institutions which impart that education are the people

who are to be affected by that, viz., the 'General Public. We cannot, under any circumstances, agree to allow the University Authorities to usurp the function of the Public.

* * *

We have all along been of opinion that Science and Medicine in particular should be *international* and that race, religion or politics should have no place in it. However pious these hopes are and they have been shouted from the housetops all over the world, in recent years there has grown a tendency for these controversial elements to creep into the Realm of Science.

* * *

The division of the Services, the basis of colour and community in recruitment into the Services and a tendency for agglutination of the medical men around one of their own race especially in questions where particular interests are concerned are examples of the above. The attitude of the British Medical Association which seems to have a great influence with the Secretary of State and recently the decision of the General Medical Council which has imported politics into Medical Education can only help in introducing these undesirable elements into the Medical Profession in India; and if such happen, no one will be more responsible for that than the above bodies.

* * *

The recent happenings in the country are also bound to repercuss on the Medical Profession. We have had reports that the sanctity of Medical Institutions and Medical Personnel have not been respected by the custodians of law and order. The report of the committee of a Bombay Hospital accuse the civil armed forces of the Government of invading the hospital precincts and indulging in an orgy of assault on all concerned. We have

heard that in military warfare one of the canons of civilized warfare is a respect for medical organisations, that armed guards are posted with all such units, and that under no circumstances are any aggressions tolerated on them. We would strongly suggest that the same immunity be extended to Civil Medical Institutions and Personnel and that at least elementary lessons on Red Cross Principles be given to all members of the *civil* armed forces.

* * *

We regret very much to have to report the death of Mr. E. K. Govindaswami, Deputy Superintendent of the St. Johns Ambulance Association, and offer our condolences to his bereaved family. He was wounded by musket fire whilst on duty in the recent Madras disturbances and died shortly after. Though not a member of the Medical Profession he belongs to an organised wing of Medical relief. We would, in this connection, wish to know whether adequate protection was extended to the Red Cross workers by the Police authorities.

* * *

We are very glad to note that the Government has been pleased to accept the recent resolutions of the Union. The recent *Fort St. George Gazette* has published the names of L. M. P. diplomates who have been appointed as Honorary Sub-Assistant Surgeons. We hope that they will not be kept always in that rank but that persons of approved merit will be promoted or initially appointed to higher ranks. Whatever reasons the Government might have had to adopt particular labels for the various diplomates, we hope that these would, at least, as far as the honorary officers are concerned be dropped and more reasonable and dignified appellations substituted.

* * *

Evidently the Bania instinct of the British have triumphed over the

high principles of the General Medical Council. The Hospitals and the Examining Bodies seem to have realised the monetary value of the Indian student and do not want to divert them to the Continent. The Royal Colleges of Surgeons and Physicians and the various Hospitals do not seem to be quite happy over the General Medical Council's latest decision and are eager to publish their willingness to continue to extend their hospitality to Indian students, of course *on payment of the usual fees*.

* * *

We are sorry that there are still some of us in various provinces who seem to be upset over the decision of the General Medical Council. The definite attitude we have to adopt is "Do we want the General Medical Council's approbation or do we not?" If, as has been expressed in various places, we do not require it and are happy without it, one cannot justify the hysterics of some of our medical politicians. Recently, Dr. B. C. Roy of Calcutta has announced in the press his resignation from the General Medical Register. We are afraid that he allowed his feelings to outrun his judgment. No registered practitioner is permitted to have his name removed from the register unless he has retired from practice.

As a result of interpellations in the Madras Legislative Council on the appointment of a Professor of Medical Jurisprudence, an abstract of the Report of the Committee on Medical Education has been published. We would have very much liked to have the report placed before the Public and opinion invited on it. We hear, on credible authority, that the recommendations of the Committee are very much interrelated and that any piecemeal action taken on the report would militate against the spirit of the recommendations.

THE GENERAL MEDICAL COUNCIL OF GREAT BRITAIN.

The General Medical Council of Great Britain, by its decision to withhold the recognition of Indian medical degrees, has attracted a great deal of attention in this country. It will be useful to review the circumstances which preceded the decision and its immediate cause.

The medical men of this country and also the medical students have been aware of the fact that some of the degrees of the Indian Universities have been recognised by this British Council and that they have been registrable in the United Kingdom. The holders of such registrable qualifications have the following privileges: (1) They are eligible to compete for the I. M. S. (2) When they desire to take the qualifying examinations of one of the Royal Colleges, they are exempted from the necessity of passing one or more of the preliminary examinations. (3) They can practise in all the British Dominions and in certain Foreign countries which have reciprocity with the General Medical Council.

As mentioned above, this recognition by the General Medical Council and the registrability of these qualifications were chiefly known to medical men and students. The general public hardly concerned itself with these facts. But this state of affairs was for the first time disturbed when the General Medical Council sent a Commission consisting of a few medical men to tour India and visit the various Universities. In Calcutta this Commission claimed the right to be present at the medical examinations, to watch and report on the methods and standard of the University examination. The University refused to allow this claim. The General Medical Council threatened to withdraw its recognition. The University was firm and would not yield. And the General Medical Council

finally carried out its threat. For some reason or other, the Calcutta University seems to have ultimately changed its mind and made it convenient for the General Medical Council to again recognize the medical qualification of Calcutta. Encouraged by the success of these hectoring tactics, the General Medical Council began to threaten more than one University and with a patronising air doled out temporary recognition over varying periods. This is how this august body of thoroughly disinterested British Medical Pundits commenced to make known its existence and its mysterious power over the Government of India in affairs *medicale*.

After the last visit to India of the inspecting Commission of this Council, its president announced that the frequent inspections from a distant body led to much trouble and unpleasantness on all sides and proposed that the Government of India should set up some authority like an All-India Medical Council to carry out the duties of supervision of medical education in India on lines acceptable to the General Medical Council. It was evidently anticipated that the Indian Council would be generally a kind of an understudy to the British Council. As the creation of such a body would have to wait legislation and this would naturally take some time, an alternative scheme was suggested that the Indian Government should agree to pay for a nominee of the British council who would carry out the duties of Inspector of Medical Education. By accident, or design, the first nominee of the General Medical Council happened to be one who is evidently not very popular with the various Indian Universities. We are almost inclined to believe that if the choice of the person was left to the Government of India or the legislature, subject to the approval of the General Medical Council, the opposition to this arrangement might not have been so firm or widespread. We

do not suggest that the arrangement would be proper. On principle any such vexatious interference would be wrong; but we are merely speculating on the appearances of the situation.

This demand of the British Council for the acceptance of its nominee was indignantly rejected by the Assembly. This assertion of commonsense and exhibition of self-respecting nationalism seem to have gone straight to the head. The sight of a staid old maid suddenly breaking out into violence shocks and stuns the onlookers exactly what has happened in India. The frequent inspections, the drawing attention to alleged defects, the repeated warnings, the withdrawal of recognition, and then tentative and conditional recognition, all these do not seem to have prepared the people of this country to expect the final act of complete withdrawal of recognition of all Indian medical qualifications. But the final act did happen. The General Medical Council has finally decided not to recognize Indian qualifications as registrable in the United Kingdom. With an air of bruised innocence, it sets out to show that it was with great reluctance that that body was compelled to adopt the present attitude. And to this end a number of arguments are set forth; which, if they are meant to be taken seriously, would certainly not enhance the reputation of that Council for sanity. The decision of the Assembly having gone home has evidently created great consternation in that quarter.

This confusion elsewhere has had its echo here in India. We said that the immediate effect of the unexpected violence was a stun and a shock. When the decision was announced, there was a wave of surprise and indignation among the medical men and the wider public. The decision was considered an insult and an affront to India. It was freely given out that the Indian Medical graduates would be seriously affected adversely. Responsible mem-

bers of Government spoke as if a calamity of first class importance has happened to this country. The Government of India has promised to hasten the creation of an Indian Medical Council to propitiate the angry goddess. Others talked of further negotiation to win back the coveted smiles of the British Council. Exalted quarters spoke of delicate diplomatic efforts in the same direction. The non-official side talked of pressure and retaliation to coerce the General Medical Council to once again recognise the Medical Indian qualifications.

Now, one does like to know what exactly are the dire consequences to this country resulting from this decision of the General Medical Council of Great Britain. This Council is a statutory body invested with the authority to regulate the quality of medical education and the conduct of medical practice in its own country. Its functions and authority are primarily local. Its recognition of the qualifications of other countries is not a hall-mark of efficiency of their medical education; otherwise most of these countries would have aimed at securing this recognition. On the other hand no country worries about this recognition except the colonies and dependencies of the British Empire. The stamp of the General Medical Council's recognition is therefore, merely the stamp of the political inferiority of these colonies and the dependencies. It has already been mentioned that by virtue of the recognition of Indian degrees, these graduates obtain three privileges. First, they can practise in Great Britain; secondly when they desire to take the qualifying diploma of any of the Royal Colleges, they are exempted from sitting for one or more of the preliminary examinations; and thirdly, they are eligible for the Indian Medical Service.

By the withdrawal of recognitions, the Medical graduates of Indian universities would lose these privileges. We

shall examine a little closely the probable effect of this loss on India.

Practice in Great Britain.—There are some Indian doctors who have settled down in the United Kingdom and who are engaged in the practice of the profession. We hear that many of them are having a thriving practice. Many of them have had the whole of their medical education there and have no Indian qualifications at all. Such of them, who have had their education in India and have obtained one of the Indian degrees, have taken one of the British qualifications before settling down to practise there. Neither of these two groups could be affected by this non recognition. Hardly any one who does his medical studies in this country and obtains a qualification, ever thinks of practising in the West. Those who are so anxious, can certainly take the trouble of obtaining a British qualification at the commencement of their career, especially as none suggests that obtaining a British qualification is very difficult for an Indian medical graduate. For these reasons, the loss of this privilege of practising in the United Kingdom has no practical importance to this country.

Examinations and British Medical qualifications.—Various considerations weigh with people who go to the United Kingdom to prosecute medical studies. Students who have done a part of their education in India and those who have come down in their final examinations form a good bulk of such people. A few students prefer to do all their medical studies in London or Edinburgh or some one or other of the centres of teaching in the British Isles. None of this group is affected by the General Medical Council's decision. In recent years an increasing number of Indian graduates go there to spend a few months or about a year, ostensibly for a refresher course or for higher studies. But they are generally content to return with one of the pass qualifications of one of the Royal

Colleges, while a few take the higher diplomas. There is an impression in the public mind, and this is more marked in some provinces than in others, that doctors with British qualifications are better practitioners than those with only local qualifications. It is up to the profession to disabuse the public of this impression. If only those who can afford to go to foreign countries for higher studies would devote their time to working in foreign laboratories and clinics without unduly emphasising on the obtaining of British diplomas, the public would very soon learn to think more of merit, learning and skill and less of degrees and diplomas. The profession could then ignore the British Council. Another important group of medical men and women with Indian qualifications who covet British registrable qualifications and higher diplomas are those in the Medical Services of the various provinces. One can enter these services and reach to the top without the possession of a qualification registrable in the United Kingdom. There is no rule which insists on the possession of such a qualification. Still, from time to time certain heads of the medical departments give out that the way to preference in the services is the obtaining of such qualifications and sometimes of even higher qualifications. Every year a number of these are given what is commonly known as "study leave". They are generally expected to spend most of the time in the United Kingdom. Such of them who do not already possess a qualification recognised by the General Medical Council waste their time in working for one and then spend a few more months to obtain higher diplomas. If heads of the medical department would give up this fictitious and inflated value attached to the mere possession of British diplomas, and would insist on merit, good work and the possession of high degrees of Indian Universities as the recommendations for preferment in Service, what amount of wastage of money,

'talent and human energy could be prevented? If foreign studies are demanded as essential, and we personally do consider it so, the candidate should have freedom to do his post-graduate higher study wherever he chooses, Great Britain, America or the Continent. Any degrees or diplomas obtainable at reputed institutions of any of these countries should be assessed alike. For others who wish to brush up their knowledge, to see things and to equip themselves with the latest advances in medicine, it is well-known that the *continental countries offer facilities not easily available in England or Scotland.* And even in Great Britain there would be no difficulty to attend lectures and the various 'clinics, so long as one is prepared to pay the fees. Therefore, from the point of view of higher medical studies and post graduate education, this withdrawal of the British Council's recognition does not stand in our way. If in spite of the various reasons put forth it is found that there are any disabilities arising out of the non-recognition of Indian qualifications, they could easily be set right so far as they affect the Medical Services by the various provincial governments using their legitimate powers and declaring in no uncertain terms that British qualifications are not necessary for advancement in the services, and by preferring in all cases people with higher Indian degrees and those who have undertaken useful Post-graduate studies in any of the *great scientific centres and teaching clinics of Europe or America.*

Eligibility to enter the Indian Medical Service.—We have shown that the loss of the above two privileges is not after all of much importance to us, and that any little disadvantage that might arise could be easily overcome by the methods that have been briefly indicated. But the third, namely, the privilege of competing at the examination for the selection of candidates for the Indian Medical Service, stands in a

slightly different category. The Indian Medical Service is considered by the Government as a superior service. This service carries with it very generous emoluments and enviable privileges. Most of the plum appointments in the Medical Departments are reserved for members of this service. For these reasons Indian graduates have been generally anxious to enter it. But during the days of selection by competitive examinations, these examinations were held only in London. Such of the Indians who have entered this service have all had some British qualification or other. In the later years, that is just before the war, a small number of Indian graduates got into this service without any previous British qualification. Some more have been taken into this service after the war, who had only Indian qualifications. But the number of such men in the service would be almost negligible as compared to those with some British qualification or other. Hence it is apparent that though in theory, Indians with Indian qualifications which are registrable in the United Kingdom have been eligible for selection into the I. M. S., in practice, this privilege has been all but non-existent. Under the present arrangements, the scope for Indian members of the I.M.S. on the civil side is not particularly bright. And as the prospect of civil employment has always been the great attraction, Indians are not likely to bemoan much over the loss of this privilege of eligibility to enter the magic circle of the I. M. S. And whatever the future may have in store for this country, so far as the civil medical department is concerned, signs are not wanting which indicate pretty plainly, that the Indian Medical Service as at present constituted is sooner or later bound to disappear, sooner rather than later and much sooner than many could be moved to admit. When this happens who would regret it? And who would have contributed to this end more than the

General Medical Council of the United Kingdom?

It might be asked "What about the immediate present? What is to happen to the few of our medical graduates who are effectually prevented from entry into this All-India Service?" The Government of India can rule that, for entry into the I. M. S. the possession of a qualification registrable in the United Kingdom is not necessary. At first sight this may appear to be a bold demand. There is nothing original or extravagant or impracticable in this suggestion. During the late war and for some time after, a large number of Indian Medical Men, with qualifications which are not registrable in the United Kingdom, were freely drafted into this service. Some of these men have held temporary commissions for seven and eight years. A few of them have also earned distinction therein. Apart from this precedent, what could be the object of insisting on a qualification registrable in the United Kingdom? It cannot be for the purpose of giving the General Medical Council an authoritative voice in the medical administration of this country. It could only be to ensure a certain standard of efficiency and equipment in the medical graduates of this country and in the candidate selected for appointment to the various services. For this purpose there is absolutely no reason to look up to an outside agency. The Indian Government should set up their own agency to guide them in these affairs. If that is done, this question of Indian qualification being acceptable to other governments will disappear.

Everything considered, there is no reason for us to be worried about this decision of the General Medical Council. That is why the Union in its resolution of last month welcomed the decision. It gives us an opportunity for getting rid of the pernicious system of preferring third and fourth-rate men with British qualifications to men of merit

who from financial or other reasons are prevented from going to Great Britain to obtain a British qualification. Moreover, relieved from the vexatious interference of the General Medical Council, Medical Education could be planned to suit Indian needs and in the light of the methods followed in various first rate centres of medical learning.

We consider therefore that this non-co-operation of the General Medical Council is a blessing in disguise. But apparently there is a well-laid move to make it appear that if this Council could be induced to reconsider its decision, it would be well for India. On the contrary, we hold that it would be a distinct loss to us, as it would enable this Council to get back the deadening authority which in a fit of folly, it has so lightly thrown away. It behoves therefore the profession and the public of this country to focus attention on the means of removing the only disability which arises out of this withdrawal of recognition, *viz*, that of ineligibility to enter the I.M.S. It is in the power of the Government of India to remove this disability and it should be possible for united efforts of the public to lead the Government to so use its powers. The public should also make it plain that there should be no endeavour on this side, in the direction of compelling the General Medical Council to recognise Indian University qualifications. But if this council is anxious to do so in the interest of the medical men of its own country, the terms under which this privilege could be extended to that body should be examined leisurely. Indications are not lacking to show that the General Medical Council is already feeling that its advisers on Indian affairs have badly let it down. But it is not our concern. Our immediate object is to see that Medical Education and the qualifying standard in this country should be perfectly independent of all outside interference, however exalted the source of it may be.

MEDICAL EDUCATION.

III

Attempts have been made to rectify some of these defects. The professorships of anatomy and physiology have been made "full-time" meaning thereby that the occupants of these chairs have been disallowed private practice, so that they might devote their undivided attention to teaching work and research. These appointments would have attracted a large number of brilliant and enthusiastic men in other countries. But it is common knowledge that the appointing authorities found no small difficulty in attracting men now in their service to apply for these posts. The reasons alleged for this difficulty are that most of the men in service do not feel specially qualified for these appointments, and that the proposed pay does not compensate for the loss of the privilege of engaging in private practice. To obviate this difficulty and probably for other reasons, the Government has hit upon a most ludicrous idea, the plan of forming "teaching cadres." We really do not know what the authors of this brilliant idea expected to achieve by these cadres. We can only guess, could it be that, by attracting *junior* assistants to enlist themselves into these cadres, the authorities hope to make it impossible for the assistant surgeons to leave these posts drawn away by the lure of practice or other more interesting jobs? This idea of the creation of teaching cadres has been in the air for well over a decade. But as yet, only two subjects have been selected for the experiment, *viz.*, anatomy and physiology. In the services, these are known as anatomy and physiology cadres. It looks as if these are two unrelated units; one in the anatomy cadre cannot change over to the physiology unit and *vice versa*. In other words, these cadres are small water-tight compartments. If similar cadres are

created for other subjects, we shall have a multitude of air and water-tight compartments in the *teaching cadre* which again is evidently meant to be entirely distinct from the non-teaching general cadre.

These cadres have been created and one would like to know the measure of success with which they work. In spite of special conscriptory methods adopted, it is well-known that young assistant surgeons in service do not come forward with any great eagerness or in any large numbers. In the first place, it is rumoured that a professor in one of the cadres is having his term of service extended year after year, because all this hot-house specialisation has not been able to manufacture a second-in-command fit to step into his chief's place after the latter's retirement. On the other hand we come across an instance of a person who was teaching some other subject, being appointed to the physiology cadre. After a few months' experience of teaching physiology, this lecturer has been found competent to hold the chair of physiology in one of the University Colleges.

It is therefore apparent that these cadres have not been attractive to men in service; they have not been useful in helping men to achieve specialisation, and they have obviously failed to supply juniors capable of relieving retiring seniors. Viewed from any point, the cadres have failed of their purpose. We are not surprised at the results. Indeed it would be a great surprise, if the results were otherwise. Experience, example elsewhere and common sense, all would tend to show that these cadres, as a means of producing efficient teachers are worse than clumsy jokes. We shall revert to this subject in another place.

Before leaving this subject of teaching staff, we shall just mention a few words about the staff of the various

medical schools. All that has been said of the Colleges which teach to the University standard applies equally to these Schools. The frequent transfers of teachers from one school to another, from one subject to another and again to another, from teaching work to taluk or dispensary work or *vice versa*, do not indicate that the authorities concerned realise that teaching is an important function, nor that it requires any specialisation. In one of the important Medical Schools, within a period of six years, nine people have successively been lecturer in medicine; five have taught chemistry; four have taught physiology and four midwifery.

Another defect is to be noted in the strength of the staff in these Schools. One would think that, in a Medical School, where so much of the instruction has to be given in laboratories and the wards, with demonstrations and individual explanations, the staff would bear some proportion to the strength of the School. This does not appear to be the view of the Government. After the Vizagapatam Medical School was closed, the students in the Andhra districts have to be taught in the Royapuram Medical School. Our information does not show that the staff of the Royapuram School has been much augmented to deal with the large increase of the strength of the School. If the Government does not believe that a larger staff is required to teach a larger class, we would invite their attention to the uniformly high rate of success achieved at the Board Examinations by the students from the Vellore Medical School.

We have in the previous issues of this Bulletin, attempted briefly to sketch out the present condition of Medical Education in Madras, noting some of the defects therein. We shall now endeavour to give an idea of the aims and methods of similar education in other countries.

Medical Education in this country has been planned on the British Model in more or less detail. It is therefore useful to have a general idea of the present state of such education in Great Britain. The population there is about the same as that of the Presidency of Madras. While there are less than a handful of Medical Schools (including Colleges) here, the number in London alone is well over a dozen. The curriculum of studies are practically alike in Madras and Great Britain. The time taken by a student to finish his Medical Schooling and the subjects he studies during the period are about the same in the two places. But schemes and curricula may have some value, but the real determining factors in Medical Education, as in all education, are the ideals, the character, and the ability of those to whom are entrusted the carrying out of the scheme. When we examine the methods of staffing the Schools and Hospitals in England and Scotland and compare it with conditions obtaining here, the contrast is arresting. To begin with, there is a striking difference in mere numbers. In a teaching Hospital the number of beds in charge of a Physician or a Surgeon rarely exceeds twenty or twenty-five. In Madras there are institutions where one man is considered responsible for a hundred beds or a couple of hundreds. In the Government General Hospital, each Physician or Surgeon is responsible for over sixty or seventy beds. If our information is correct, these officers do not consider this number too many for them and sometimes they are reluctant to part with any of these beds especially if these beds are for Indian patients when an additional man is appointed. To illustrate this aspect of Medical Education we shall give the staff strength of some of the well-known Teaching Hospitals of Great Britain and also of America. The University College Hospital in London has about 500 beds distributed to various departments looked after by over 70 men.

Sir Thomas Lewis, the famous cardiologist is a full-time physician in the Hospital. He has under his charge only 14 beds with all the equipment necessary for research. And for this small clinic—people here might say absurdly small clinic—he finds “full time” in the strictest sense, inadequate rather than otherwise.

Every Medical man has heard of the Johns Hopkins Hospital in America. Less than a generation ago, Medical Education in America was in a thoroughly confused state. The methods introduced for the first time in this teaching hospital raised the standard of Medical Education from chaos to unrecognisable heights of efficiency. As a School of Research and Investigation into problems of Medicine it stands to-day as high as any in other countries. The institution is famous by its association with the names of Osler and Adami. This Hospital has about 700 beds and a Medical Staff of about 230. When this fact was brought to the knowledge of a high placed individual who had the ordering of Medical affairs in this province, he wondered what so many doctors did in a Hospital of 700 beds with a Medical School attached to it. Yes, one may wonder. But we would leave it to the pundits worrying over reforming Medical Education in this province to explain the significance of this large staff. In Canada, the standard of Medical Education is considered to be high. That is why the Royal College of Surgeons of England have made special arrangements to conduct examinations for their Fellowship in Canada itself. They have sent examiners all the way from England to sit with surgeons in Canada to examine candidates there. Here the McGill University Hospital has for about 600 beds a Medical Staff of over 160. We can give a number of such examples. But we have only instanced here a few of the Teaching Hospitals which are admittedly of the front line

in the English speaking countries. And we are sure that none will dispute our contention that the large staff makes for the high efficiency and continuous efforts of fruitful research.

RURAL MEDICAL RELIEF IN THE MADRAS PRESIDENCY

By Dr. Ramasubbu, L.M. & S.

Secretary, the Madras Provincial Rural Medical Practitioners' Association.

A scheme for the provision of skilled medical aids to the necessitous poor of the rural population is working in this presidency, according to which private medical practitioners are encouraged to settle down in villages by the grant of money subsidies and supply of medicines from public funds towards free treatment to the necessitous poor, while they (the practitioners) are allowed the liberty of charging fees from the rich patients to supplement their income.

2. The scheme is well meant but the terms offered to the practitioners are not quite attractive, and would explain the scanty success that has attended the working of the scheme till now. The subsidy offered, Rs. 41½ for an L. M. P. and Rs. 50 for a medical graduate monthly, is very inadequate, as there is little or no income from private practice. In his latest annual report, the Surgeon-General observes that the subsidy originally granted to the rural medical practitioner was found to be inadequate; while it is true that a few of the medical practitioners can earn a satisfactory livelihood, the great majority have sought to escape from their hand to mouth existence.

3. There is greater cause, still, for the practitioners' escape, to wit, the humiliating treatment meted out to them by the authorities, and a tendency

on the part of the latter to go behind the rules and treat the practitioners as mere subordinates. Very recently the Surgeon General disallowed the enhanced subsidy given by a taluk board to its rural practitioners though Government have empowered the boards to supplement from the board funds, the subsidy of the practitioners who live in remote or unhealthy villages. In another case a taluk board passed a resolution on the advice and approval of the D. M. O. requiring the medical practitioners in charge of rural dispensaries to treat even the *rich people free*, notwithstanding clause 2 of the agreement G.O. No 1994 P. H., dated 28th September 1925, requiring the practitioner 'to treat professionally and supply medicines, free of charge, to all the necessitous poor of the locality (who are defined as persons or members of the families of persons whose monthly income does not exceed Rs. 30),' subject to which condition they would be entitled to practise for his own benefit and charge reasonable fees for services rendered to the other patients. Clause 7 of the same agreement lays down that if the practitioner shall engage, maintain, and employ a qualified midwife..., the taluk board will pay to the practitioner an additional sum of Rs. 100 (now enhanced to Rs. 300) per annum... G.O. No. 942-P. H., dated 6th April 1929, which orders the enhancement, makes the D. M. O. the bursar of such subsidy, 'instead of the practitioners who engage them as was done hitherto', but does not say that the appointing power has been taken away from them (the practitioners) nor has the original clause in the agreement been amended, and yet, the power of appointing and controlling the duties of the midwife is denied to the practitioners by the taluk boards. Transfer of rural practitioners are still indulged in, while some taluk boards do not supply their practitioners the most necessary instruments or drugs to the full value of Rs 360 per annum, in spite

of the clear orders of the Government. Some taluk boards insist on the rural practitioner getting their previous sanction before going on leave, though rules would require the practitioner to intimate to the President before proceeding on leave, and report his arrival immediately after return. Complaints are also received from numerous medical men in charge of rural dispensaries, that they are forced by their Presidents, on the advice of the District Health Officers, to do festival, election, cholera or plague inoculation work without any extra remuneration, as is due to him by virtue of Government Memorandum, No. 29415-2-D-3 P. H., dated 26th October 1927, which states, 'that cholera or plague inoculation work is not part of the ordinary duties of the rural practitioner.'

4. Thus every provision of the law has been set at naught by some President or other, and any attempt on the practitioner's part to disobey such illegal orders, or assert his independence has only served to stiffen the attitude of the President towards the practitioner, and cause an abrupt termination of his (practitioner's) services under some pretext or other. In fact, it did happen so in one instance, and the practitioner's appeal to Government was unsuccessful. An impression is gaining ground among rural medical men, that he who incurs the wrath of his President, is sure to be sent to the wall; and this would explain why the authorities could not find practitioners to work all the sanctioned rural dispensaries. At the end of 1929, only 395 were working out of 466 sanctioned. Unless medical men are offered a bigger subsidy, and are assured better treatment and stricter adherence to the rules on the part of the authorities, the provision of adequate skilled medical aid to the rural population would only be a pious hope.

ACTION OF HEDYOTIS
AURICULARIA IN CHOLERA.

By P. R. Bhandarkar, L.M.S., Madras.

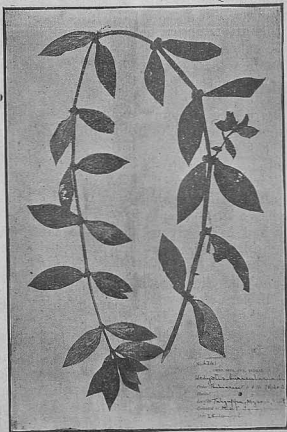
A preliminary paper on the medicinal properties of this plant—(not yet recognised in the pharmacopœia)—*Hedyotis auricularia*, N. O. Rubiacœ in COLITIS with special reference to Human Amœbiasis, has been published in the August 1929 issue of the Bulletin of the South Indian Medical Union.

In the course of my clinical investigations, on the action of this drug in dysentery, I had occasion to treat a case of infective diarrhœa in a child, aged 18 months, which had developed an incessant and distressing thirst on about the sixth day from the onset of the disease. The child was a marasmic one and of poor parents living in insanitary surroundings. Impressed by the action of the drug in cases of colitis and dysentery, the child was put on *Hedyotis auricularia* which was given as a bolus of the fresh green leaves ground fine with cummin seeds and omam into a thick paste. No other medicine was prescribed but only water with a small quantity of the above bolus was allowed. The distressing symptoms of thirst and vomiting ceased entirely with a few doses in a short time and the diar-

rhœa, too, was controlled to some extent; after this, an astringent mixture also was prescribed and the child got over the attack gradually.

At this time cholera was prevalent in the City of Madras and an opportunity presented itself in a typical case of cholera for which nothing had been

done by way of treatment for about ten hours from the onset of the disease. The attack started with two profuse watery motions. Later the diarrhœa became associated with severe vomiting and cramps ending in prostration with suppression of urine. The patient aged about 50 years was in a condition of extreme shock as manifested by the pinched, anxious look with sunken eyes, cold and clammy extremities, sweats and a very feeble and rapid pulse. The motions which had become involuntary were characteristically odour-



Hedyotis auricularia, (Linn), N. O. Rubiacœ
from a specimen in the Herbarium of the
Presidency College, Madras.

less and rice-water like in appearance. He was conscious and complained of the cramps as unbearable.

The case looked desperate and he was made to swallow a good size bolus (weighing about 4 drachms) of *Hedyotis auricularia* leaves followed by a cup of water. He was injected half a grain of morphia hypodermically to ease the severity of the cramps and this was

followed by another injection of 1 c. c. adrenalin with $\frac{1}{2}$ c.c. of pituitrin to combat the shock.

Nothing else was prescribed by way of internal medication beyond the crude drug boluses in doses of two drachms at a time to be repeated with the copious drinks of water to relieve his intense thirst. Subsequently, he had two more motions but no vomiting and the cramps were not much complained of; with this little improvement, the hyper-tonic saline (intravenous injection) treatment was deferred and later dropped entirely as there was marked improvement within six hours in the condition of the patient and which improvement continued to be steady for another six hours; for warmth had returned to his extremities, his pulse had improved much and the patient was only looking weak and prostrated. He had a large vomit of curdled milk which had been given against instructions and the kidneys had not started functioning. Adrenalin (1 c.c.) was injected and the diet was restricted strictly to barley water or rice water. Urine was passed in 15 hours time since the treatment had been commenced and the patient had an undisturbed night.

He was kept on liquid diet and a sedative bisruth mixture was given in addition to the Hedyotis auricularia treatment for a day more, after which he became fully restored to normal health and allowed his usual diet.

Both the above cases were reported to the Health Officer of the Madras Corporation and came under his observation also.

A case similar to the preceding one and attended with diarrhoea, vomiting, cramps and suppression of urine, was treated successfully in an identical way and yet another child, suffering from infective diarrhoea treated with the crude drug bolus, recovered rapidly and fully.

The next case was an interesting one. A boy, aged 7 years was treated with this drug practically, in the last moment and he died. Subsequently his mother who attended on him was also attacked with cholera and she was given Hedyotis auricularia bolus alone from the commencement of the attack and she recovered very rapidly in a day, being none the worse for the attack.

All the preceding cases were treated somewhere about September 1928 and the following case was treated at the end of June 1929:—Baby, age 18 months, (father sweeper) had an attack of acute diarrhoea and vomiting of 24 hours' duration complicated with intense thirst, he was given Extract of Hedyotis auricularia in 40 minimum doses repeated every three hours. There was much relief with the first four doses and, later, was cured.

About this time, a report about the prevalence of cholera epidemic in the Periyakulam Taluk, Madura District, appeared in the Hindu of Madras and the Director of Public Health, Madras, was approached with a view to have the drug tried through the District Health Authorities of the infected districts. This appeal for departmental trial failed but the department had no objection to my doing so personally and on my own responsibility. On this I left for Madura on the 13th of July 1929 with no other equipment than a good supply of the Extract of Hedyotis auricularia—"Hedaurin"—an abbreviation which will hereafter be used for brevity and convenience. Through the courtesy of Dr. Ramaswami Iyer, the District Health Officer of Madura, a Health Inspector who was returning to the infected area on inoculation duty accompanied me and this helped me greatly in my venture; I cannot sufficiently thank the Health Officer and the Health Inspectors concerned

for their silent but whole-hearted co-operation.

I got material to try this drug the very day of my arrival at Madura, in Yedayampatti, a village about thirty miles from the former place. In this village the epidemic had appeared only two days previously and there had been, three deaths before we arrived at this place.

Some twelve cases of cholera in all stages of the disease as had survived from the attacks of that day and the two previous days, were treated with Hedaurn and of these only one—an old woman who was sinking and who could be induced to take but one dose—proved fatal. Eight of the twelve had had the routine Government Prodiarrhoea and Potassium Permanganate (2 grains, keratin coated) pills or village

remedies given before Hedaurn was given and four only were fresh cases treated with Hedaurn alone. Two cases were in the typical typhoid or reaction stage, and five were very severe cases; only the first two required more than four days treatment for full recovery and the rest were fully convalescent or cured before the third day of the treatment.

Thirty-eight more cases of cholera from five other villages were treated as well; of these, eight proved fatal,—two after lingering for more than twelve hours under treatment and the remaining six within 4 hours after commencement of the treatment. Besides these, there were five more fatal cases of cholera in these villages which were not given Hedaurn owing to failure to report attacks or refusal of treatment.

The above results classified and tabulated are as follows:—

I

Statement showing the mortality averages from Cholera, before and after introduction of Hedaurn Treatment on 14th July, 1929

VILLAGE.	First Case reported date in Village Epidemic Register.	Prior to 14th July, 1929.			After 14th July, 1929.		
Yadayampatti ...	12th July 1929.	6	3	50%	*22	*4	18.2%
Hanumantbampatti ...	24th June 1929.	73	32	43.8%	†13	†5	41.6%
		79	35	44.3%	35	9	25.7%
*† Corrected averages	30	4	13.3%

* Three out of the four cases had had no Hedaurn given for two died before arrival, and one was attacked and died within a couple of hours whilst we were attending to cases in an adjoining village.

† Two died without Hedaurn (one refused to take and the other died before supplies could arrive) and the remaining three had one or two doses given.

II

No. Treated.	No. Cured.	Died	Mortality.		Remarks.
Cases from attacks prior to 14th July 1929 which had other treatment previously but after treated with <i>Hedaurin</i> ...	23	21	*2	8.7%	** Only two died after lingering for more than 12 and 30 hours and the rest before the second or third dose was given.
Cholera cases from attacks on or after 14th July 1929 treated with <i>Hedaurin</i> only ...	28	24	*4	14.3%	
Combined for both the classes above ...	51	45	6	11.8%	

I had to temporarily suspend work with *Hedaurin* in cholera, in spite of the encouraging results till December 1929; and the cholera in the southern districts of Madura, Ramnad, Tinnevely had continued to prevail in more or less epidemic proportions all these months. One of the defects of the previous investigations in the city of Madras as well as Madura District, from a scientific point of view, was the absence of any bacteriological examinations and this came to be remedied on this occasion through the kind offices of Lt.-Col. H. H. King, Director, King Institute, Guindy, and Dr. Adisheshan, Assistant Director of Public Health, Madras; peptone water bottles and agar culture slopes were provided by the former and the District Health Officers concerned were requested by the latter to send to the King Institute officially any bacteriological material that might be collected and also facilitate my work without prejudice to their official duties. I cannot sufficiently thank them both, nor Dr. Rajarathnam, the District Health Officer of Tinnevely for the success of the work undertaken, not forgetting the help and co-operation of the village officials and residents of the infected

villages of Tinnevely district which was selected this time as it reported the largest number of attacks and deaths during the previous week.

To begin with, there was disappointment in the two municipalities of Palamcottah and Tinnevely Town as also in the Union Towns of Nanguneri, Tenkasi, Sankaranayanarkoil and some other villages all officially declared infected, for the epidemic had subsided in these places and only sporadic cases of cholera were being reported.

All this disappointment was more than compensated, for, on the 8th of December in the out of the way village of Perumalpatti and surrounding hamlets we came across and treated 26 cases of cholera in all its forms and stages. Bacteriological specimens from five different cases were also obtained and sent to the King Institute and more than six hundred anti-cholera inoculations also were done by the Health Officer himself in advance of the special duty inoculation party that was following. The rush and keenness of the inhabitants of these villages to get inoculated was a contrast to my experience of Madura villages. Of the 26 cases treated with *Hedaurin* that

day, only two fatalities were reported by the Health Inspector of the Range. At Vasudevanallur, we came across 28 cases on the 9th, 18 cases at Viswanathperi and one at Shivagiri on the 10th and specimens from seven more cases were sent to Guindy. Of the above 66 cases, about a third had had the Government routine treatment before our arrival.

Immediate arrangements were made for the distribution of Hedaurn to affected persons either through a local doctor, or the Village Munsifs or public spirited villagers whereby 103 cases were treated with Hedaurn alone,—no other medicines being given; this enabled me to observe some cases more closely and collect specimens for cultures from faeces and vomits passed both before and after treatment with Hedaurn from 11 cases. Vasudevanallur and Viswanathperi are sixteen miles apart and Shivagiri is situated between them. The first one has a doctor and the second one had to depend on the four-mile distant Shivagiri for medical aid. But here Mr. Parasaram Naidu, U. P. A. S. I., Agent of Viswanathperi was entrusted with the distribution of Hedaurn as he had been doing good work in the prophylactic line by distributing 'Bilivaccin' to villagers and keeping records of the same. Forty-six cholera cases were treated by him by issuing Hedaurn systematically, dose by dose as required, to individual cases and recording the same with notes. He has recorded six deaths out of the six cases so treated by him and the following remarks are noted against each casualty in the remarks column:— "Treated dangerous stage, died" for two, "Took first dose only, afterwards treated with village medicines against two" vomiting stage, taken solid food, going worse, died "for one and died before medicine reached" against the sixth fatal case.

This village recorded 106 attacks and 88 deaths from cholera in the Village Epidemic Register before Hedaurn treatment was introduced.

Below are a few detailed notes from some cases treated with Hedaurn are given below:—

1. Sayyad Duanalli, age 9, came under treatment during the early stages of the disease when he had three motions and the fourth had just been passed. The patient was not bed-ridden, no pernicious symptoms had set in. The motion (fourth one) was characteristically watery and rice water like in appearance and a shred of mucus from this was taken for inoculating peptone water for culture, which proved *positive*, cholera vibrios being isolated at the King Institute. He was started on a first dose of two drams Hedaurn which was repeated in one dram doses every three hours and diet was restricted to liquids only as rice water or barley water. He had one more motion before the second dose was given and the next one he had after eight hours was more faeculent and yellow; he had a normal motion on the next day, and was reported cured.

2. Rahima Bi, age 19, history of having had two loose notions over night. She was looking bright and cheerful. As her people were not inclined to take voluntarily the treatment offered by us, she was left alone that morning. During our rounds next day, she was found in a collapsed condition, semi-conscious and the pulse was very feeble and hardly perceptible at the wrist. There was vomiting with violent retching. It was reported that diarrhoea started again that evening attended with severe vomiting and suppression of urine ending in collapse. Hedaurn was given every two hours. An injection of Adrenalin and pituitrin was also given hypodermically.

Cholera vibrios were isolated from a specimen taken from the vomited matter. She had one more motion and two more vomits after the treatment was started but showed signs of improvement before the evening, urine was passed during the night and when seen next day she was better though weak and exhausted. Hedaurin treatment alone was continued and she was fully convalescent in 48 hours requiring about 10 doses of Hedaurin in all.

3. Ramalingam, female child, 5 years of age (Vasudevanallur). The disease manifested itself with loose watery motions with vomiting and she was given Hedaurin by the local doctor and when seen by me, the child was having motions, muco-serous in character from which a specimen was taken. She was restless and there was no vomiting after the treatment. Hedaurin in dram doses was continued and the motions she had afterwards were less in quantity though watery and full of mucus shreds. The child showed improvement before the evening and another specimen was taken from a motion passed at that time, i.e., about twelve hours after medication when the motion was tinged brown with Hedaurin. Cholera vibrios were isolated from both of these specimens at Guindy. Next day the child had an yellow and semi-solid motion and was convalescent. Hedaurin was kept up for two days more in half dram doses given four times a day and the child fully recovered by that time.

4 & 5. Karpayi, age 21, female, (Subramaniapuram). Date of Attack, 9th December 1929. She had six watery motions and two vomits before she was seen and treated with Hedaurin. She was much exhausted and had a weak pulse with cold extremities. Cramps were complained of and there was suppression of urine. She was given two drams of Hedaurin to start

with, some twelve more doses were left behind. This village was visited again on the 12th when it was found that, that patient had recovered completely and was attending on her husband who had subsequently been attacked and treated with Hedaurin left over. He was in a convalescent stage and was given four more doses, when seen two days later, was fully recovered.

6. Ganapathi, age 13, (Viswanathpe-ri). Attacked early morning of -12-29. Treatment commenced at 4 p.m., same day when the patient had altogether seven motions and had two vomits and suppression of urine; he was very weak and exhausted and had cramps for attempting to sit up to pass a motion he actually fainted. Peptone water was inoculated from this motion for examination, and he was given Hedaurin in two drams first dose, repeated in dram doses every three hours, was much better next day with a history of having had two motions, and vomiting after the treatment and urine had been passed some time after the second motion, after treatment with Hedaurin. He is given four more doses for full recovery. Cholera vibrios were found in the specimen sent for examination.

7. Voila Nadra, 40 years. This man was attacked on his return from the funeral of his second son, and subsequently his last son was also attacked. The latter was sinking when seen and died a few hours later. The father did not succumb to the disease during the extremes but passed on to the typhoid state, with low delirium, fever, small and frequent stools, with vomiting, blood shot-eyes and sordes on his lips and teeth, he was put on dram doses on Hedaurin, given every four hours and recovered slowly in about three days and was fully convalescent when seen on the fourth day after treatment.

8. Mariakkamal, age 32, female (Shivagiri Village). Attacked on the

night of the 9th when she had only two loose motions. After which she slept well. Diarrhoea attended with vomiting started again on the 10th morning and she collapsed soon, and was treated at 1 p.m. same day. She had ten motions and four vomits, with extreme shock old clammy extremities, very feeble pulse, suppression of urine an anxious look and cramps were complained in both legs and hands for she was fully conscious. She had not been given anything by way of medication. The Prodiarrhoea Mixture and Keratin-coated potassium permanganate pills fetched from the local dispensary had not been given. She was given two drams of Hedaurin to commence with and six more doses of 1 dram each were left to be repeated every two hours. By way of diet only, rice or plain hot water was allowed *ad libitum* to meet the thirst. Cholera vibrios were isolated from a specimen taken from bits of mucus sticking to her clothing and sent to the King Institute, Guindy. Next day at noon she was better all round though weak and prostrate, and it was reported that she had one or two small motions before that evening and one that night, after which she passed urine. There was no vomiting after Hedaurin was given. Four more doses of Hedaurin were repeated next day to be given for the next 24 hours and on the third day (12th) she was found sitting up in an adjacent room; the report was that she had a normal looking motion that

morning and she was feeling strong. On the 13th when visited again, she had to be called from a neighbour's house and she declined with thanks any further treatment.

9. Srirangamma, female (Shivagiri Village). Attacked early hours of the 14th and treated with Hedaurin from 1 p.m. same day. She had about seven loose watery motions and last of these was coloured red for it was said that she had been given some local specific said to contain red oxide of mercury and also essence of omam karpoor.

A specimen for this motion was collected for bacteriological examination. She was put on Hedaurin (in all about five) till next morning, but she did not grow worse and her condition improved slowly and steadily to recovery on Hedaurin alone. Two more specimens from stools passed 8 and 18 hours after Hedaurin treatment (when the motions had changed colour to brown like that of Hedaurin) were taken and sent to the King Institute and cholera vibrios were reported to have been isolated *from all the three*.

Incidentally it may be mentioned that the week ending 14th January, 1929, happened to be the height of the epidemic in the Presidency of Madras for the year 1929-1930 as can be seen from the following table compiled from the weekly epidemic reports published by the Health Directorate in the Fort St. George Gazette.

Week Ending.	Attacks.	Deaths.	Mortality.
23rd November, 1929	1,059	524	49·48%
30th November, 1929	1,412	799	56·58%
7th December, 1929	1,381	746	54·40%
*14th December, 1929	1,916	970	*50·62%
21st December, 1929	1,730	946	54·68%
Total from 28th July 1929 to 4th January 1930	14,127	7,240	50·54%

*Deducting the 170 cases treated with Hedaurin, the Presidency figures for the week in question are 1,746 attacks with 946 deaths, i.e., 54.39% whereas mortality amongst the 170 cases (about 1/11 of the total) coming under the influence of Hedyotis auricularia at the height of the virulence, was only in 12.9% which figure is creditable indeed when compared with the 54.39% and 70.4% mortality average for the presidency and the district respectively for the same week and the more so when we take into consideration the following:—

No discrimination whatever as to the stage of the disease or condition of the patient, etc., was exercised.

All the cases except one from Palamcottah Municipality, were from rural areas and amongst poor and ignorant masses majority whom could boast of only the famous Burmah-Shell tin pot in their primitive huts.

When once Hedaurin was started, no other medicine was given by the mouth and that was left behind for distribution to the attacks through the Village Munsif, or some local residents. Injection of Adrenalin and pituitrin (saline in the one municipal area case) was resorted to as an additional measure in some nine extreme cases in a sinking condition with only one recovery.

Very few from the fatal cases, had any bowel evacuation after treatment and most of the severe cases that did recover reported one or more bowel evacuations which may indicate the extensive denudation of mucosa leaving little or none as an absorbing area in the former, due to complete paralysis of the gut.

All the number of cases that recovered did not become constipated but had had healthier looking motion or motions with bile pigments, when once convalescence set in the subsequent days.

Constipation did not figure as an after effect of Hedaurin treatment, in any of the recovered cases but one and all reported passing a normal motion or two daily during the convalescence. This remarkable feature has also been observed in cases of colitis, acute or chronic, where also it does control diarrhoea, quicker than powerful astringents yet does not constipate like those. It may not be out of place to mention here the experience of another doctor of Madras. This doctor has been using Hedaurin for some time in colitis, etc. He was treating an enteric fever case where severe diarrhoea became a complication. The usual orthodox remedial measures were tried to no avail. Assured that enteric fever was not a contra-indication for the use of Hedaurin (for it had been given in another enteric fever case where dysentery was a complication), he put the patient on Hedaurin and it was reported by the doctor that the diarrhoea was fully controlled before the fifth dose had been given, and the disease ran its usual course to recovery.

No case developed any untoward gastric symptoms during Hedaurin treatment, but, on the other hand, any such symptoms existing before the administration of Hedaurin, disappeared soon. All ages tolerated the drug well, and especially children could be treated with it with absolute safety and ease, being non-narcotic and pleasant to take. With due deference to those who advocate the routine Government Prodiarrhoea mixture (Essential Oils) and the Keratin coated 2 grains pills of potassium permanganate advocated in the hope of combating the toxins in the intestines, I venture to suggest a doubt whether such treatment may be an additional infliction on the diseased in their sufferings. It is a well known fact that when the disease is established, no powerful drugs must be given by the mouth in large quantities, as

little absorption takes place from the stomach. Not only such drugs be useless, but a portion may remain in the stomach to be absorbed during the period of reaction, and so prove injurious (Manson-Bahr). The above observation may apply to this mode of treatment for, being distributed freely amongst the ignorant masses who use without guidance from a medical man. Sir L. Rogers advocates the highly oxidising caustic permanganates of Potassium or Calcium to destroy the toxins in the intestines. He gives a solution of $1\frac{1}{2}$ to 1 Gr. per pint and rapidly increases the strength to 4 to 6 Gr. If the patient will swallow it, he allows the patient to take this solution *ad libitum* or he gives it as 2-Gr pills. The insolubility of the Keratin coating in the stomach may hold good in normal animals but not in this disease, where there is complete dislocation of the functions of the alimentary tract which is heavily or highly inflamed, and in such a state some of the poor villagers have been known to have taken as many as they could lay hands on. In further support of this contention, I may quote the following remarks of another eminent authority on the administration of quinine in solution by the mouth.—‘There are extremely few people who will take quinine in solution. Any doctor who has been in the habit of prescribing quinine in solution or who is disposed to do so in the future, should investigate the method by taking it himself. He will have to have a good amount of grit to keep it up for the period necessary to disinfect a patient of malaria.’ (Charles C. Boss; Tice, Practice of Medicine.)

A certain amount of diuretic action has been observed by me and even pointed out by lay people, but it is too early now to say whether it is a direct action of the active principles of the drug on the kidneys, or an indirect one after the neutralisation of the cholera

toxins in the system thereby enabling the kidneys to function.

Digt seems to be an important factor during treatment of the disease; at least for the first two days, only lightest liquid diet seems to be permissible, for, some of a dozen though improving on the treatment, have taken bad and died on solids being taken. All the bacteriological specimens from stools, vomit, passed both before and after treatment with Hedaürin, and in one case the specimen from a motion passed after three days, and during full convalescence (unfortunately no specimen from motion prior to administration of Hedaürin was examined from this case) were *positive* for cholera vibrios when examined at the King Institute. Six out of the twenty-two cases from which specimens were collected and examined, proved fatal. From the above, it may be seen that the active principles in the drug have no direct action on the vibrios in the intestines, and it may be that they exert indirectly by neutralising the toxins in the system. Where and how they are neutralised has yet to be determined.

It is evident, though, that the active principles in *Hedyotis auricularia* do exert a really potent, wholesome and quick effect in cholera, restoring even severe cases to normal with minimum sufferings and a short convalescence. And it looks as if, we have, in this simple plant, the much wanted all-round specific radically curing this dire disease which has been and is, periodically carrying away, huge numbers of poor masses, before much could be done by way of treatment. A study of the Village Epidemic Register shows that there is an interval of some ten to fifteen days between the first case report and the disease assuming epidemic proportions, this points out to a certain extent, if well equipped itinerant epidemic dispensaries, (for both prophylactic and regular treatment) and capable of being moved quickly

may not do more good in the rural areas. Another factor that was observed, revealed from the study of some of the Village Epidemic Register, '50% mortality amongst those affected by the disease, of this 50% only a third appear to have died on the same day, of the attack from the disease and the remaining two-thirds, of the fatal cases, on the second or any subsequent day, that there is ample scope for treatment and lowering of mortality from cholera in all stages of the epidemic. It may be idle at this stage to forecast the ultimate results and also how far the advice "Native Remedies must not be despised" given by Manson Bahr, (An Index of Treatment, Hutchison and Sherren) has been vindicated, it be best left for the future to decide. The above narration is not by way of a Scientific exposition of this new drug, but only simple facts observed in the course of the treatment, of cholera with Hedyotis auricularia, and narrated in the hope that they may be of some use to such of the General Practitioners who, whilst conservative may elect to be also eclectic and accept the clinical efficacy of the drug adduced, and also that it may prove sufficient inducement for a further thorough pharmacological work, correlated with clinical and pathological investigations, by the scientific world in general, on the medicinal properties of this plant not recognised in the Pharmacopoeia to enlighten us as to *in-vitro* and *in-vivo* or better still in that most mysterious laboratory of all, the human body itself—thereby further help the clinician who turns equally to the study of methods, wherewith to combat disease directly. Finally, it remains to be seen whether by the adaptation of this simple plant, in the Pharmacopoeia, we have conquered Two and not One, of the most difficult diseases of the Tropics, once and for all.

{I have to thank the Pharmacological Research Institute for supplying me with the necessary assistance for this research}.

THE SINUSES IN RELATION TO THE EYES.

By E. V. Srinivasan, M.B., C.M.

(*Ophthalmic Surgeon, Royapettah Hospital, Madras*).

The relation between the orbit and its contents and the complex system of air-cells in the bones of the face almost completely surrounding the orbit is of the first importance to the ophthalmologist. Many of the earliest symptoms of the disease of these sinuses bring the patient to the ophthalmologist. Anomalies of the field of vision, presence of scotoma, central and paracentral, enlargement of the blind, spot play a conspicuous role in the detection of sinus disease.

Relation of nose to eye.—The headache of nasal disease very closely resemble the headache of refractive error and so the oculist sees these cases. The location of headache is not characteristic of any particular sinus disease, although the pain of frontal sinusitis may be located over the area of the sinus. These sinus headaches occur at nights, an unusual time for ocular headache. It is frequently paroxysmal occurring at regular hours usually in the morning and ending at a corresponding time each day.

Ocular headaches are always bilateral, rarely severe, accompanied by nausea and vomiting and it is practically always a daylight headache. When the lights are turned out, no use is made of the eyes, so there is no eye strain and no reflex pain. It is often associated with hyperopic astigmatism, latent hyperopia, following only, nearly always, prolonged and continuous near work. Much use of the eyes for looking at distance also brings about a similar result, say after a cinema show or a railway journey. Headache of eyestrain is also followed:

by pain in the eye itself, redness of conjunctiva blepharitis and other signs of ocular involvement. Vertigo, also a sign of sinus disease, if ocular, is associated with diplopia disappearing by shutting one eye. The history of other eye symptoms like blurring of print while reading will help. It never comes on when patient lies down or sits quietly.

Ethmoidal pain is most frequent at the root of the nose or behind the eye and may be exaggerated by ocular excursions. The pain of *antrum* is often referred to the teeth of the corresponding upper jaw and to the ear in the back or side of the head marked or increased by stooping.

Sphenoidal sinusitis produces occipital and temporal headaches and pain at the back of the eye and base of the brain. Cases are frequently free from pain, though percussion of walls may elicit tenderness. Easy exhaustion of eye muscles or asthenopia is very often due to nasal disease, probably reflex, as the nerve supply is derived from a common source, the V nerve furnishing the sensory roots for the motor nerves. Photophobia and lacrimation may be due to a conjunctival congestion occurring during a sinusitis or to involvement of ocular muscles including the ciliary. Another symptom of sinusitis is pain in the corresponding eye noted upon looking up while trying to read. Application of cocaine to the swollen turbinals gives relief to the above symptoms showing the necessity for cauterising the turbinals. The mid-turbinal may cause pressure on the septum which is very sensitive at this spot and synechia between the septal spur and the anterior end of the mid-turbinal is a frequent source of supra-orbital neuralgia, lacrimation, conjunctival hyperaemia with burning and smarting, blepharitis, etc. When mid-turbinals impede respiration and prevent air from reaching the superior

meatus in the so called attic of the nose, these various reflex eye symptoms arise. The Sunday morning headache of some *gentries* is due to prolonged pressure of mid-turbinal on the septum from sleeping unusually late. Many cases of iritis which are considered to be rheumatic, idiopathic or of auto-intoxication are undoubtedly due to nasal disease.

Orbital inflammation is always due to extension of inflammation from the accessory sinus of the nose. Swollen lids, widening of lid aperture and displaced eyeball result. The direction of dislocation points to the sinus of origin, outwards in ethmoid, forwards in sphenoid and downwards and outwards in frontal. These orbital abscesses unless drained early will lead to optic nerve trouble, if not to ulceration of cornea and panophthalmitis. These are mostly posterior ethmoidal occurring in children as well as in adults

Acute Frontal Sinusitis is secondary to acute rhinitis beginning with sensation of heaviness and pressure above the eye accompanied by fever and malaise. The pain may be severe and of a bursting character. Percussion of the sinus area is painful. Pressure at the upper and inner angle of the orbit elicits tenderness. Stooping increases pain and causes vertigo. Blurred visions and restriction of field with accommodative asthenopia amounting to pain in reading with photophobia and lacrimation are symptoms. A fistula of the frontal sinus may produce an abscess at the inner canthus simulating dacrocystitis.

Chronic cases have only headache, the diagnosis chiefly depending on presence of secretion on the upper part of the mid-meatus. Transillumination has a corroborative value. Röntgen ray photographs are of greater value especially with negative nasal findings.

Sphenoidal disease.—Symptoms are purely anatomic. Headache is occipital, temporal or behind the eye. Post-nasal discharge draining into nasopharynx is a fairly common symptom. When the secretion is profuse, the dropping is felt in the pharynx and also crusts to the pharyngeal vault. The mental symptoms frequent in sinus diseases are most pronounced in Sphenoidal sinusitis, such as lack of concentration, loss of memory, depression, hypochondriasis, neurasthenia. Mild attacks of sphenoidal inflammation may occur with each attack of acute rhinitis until finally the process becomes chronic with almost chronic secretion draining post-nasally. The posterior ethmoidal cells may be simultaneously involved. The optic nerve changes may vary from slight oedema to an active papillitis. Dimness of vision or absolute blindness, unilateral headache increased by stooping, by a heavy meal or by alcoholic drink. The menstrual period is accompanied by increased headache. This symptom was present in a female aged 40 who came to me with fingers-at-3-metres vision in the right eye and left eye normal. She had only occipital headache and papillitis. The sphenoidal sinus was opened with subsidence of papillitis though the vision continued to be the same.

The most frequent change in the field of vision is unilateral central scotoma for colors and for white in advanced cases. A case of retrobulbar neuritis with blurring of central vision gradually extending to the rest of the field and one of optic neuritis with narrowed visual field have improved by attending to the nose by simple douche with nasal plasma. If the obstruction caused by the hypertrophied middle turbinal and polypoid masses is overcome by their removal, the field improves and the acuity of vision returns. When the very close relation of the canal of the optic nerve with the sphenoidal sinus and posterior ethmoid

cells is considered, the optic nerve disturbances are easily understood. In some cases the process is essentially toxæmic, which explains the first affection of the highly organised optic nerve fibres to the fovea resulting in central scotomas. A very favourable symptom in optic nerve cases is the improvement in vision which frequently follows the thorough contraction of the swollen nasal mucosa by adrenalin and cocain. In such cases we reasonably effect a satisfactory result from the re-establishment of free communication between the diseased cells and the nasal cavity. Few years ago, I had a boy patient who had a persistent oedema of the right upper lid of six months duration unaccompanied by oedema of bulbar conjunctiva or proptosis. This boy was suffering from a musical lung as well. Local as well as constitutional treatment failed to reduce the swelling. The rhinologist to whom I referred the case removed a myxomatous middle turbinal polyp. This, perhaps, drained the anterior ethmoidal and frontal sinuses. The oedema disappeared in a couple of days closely followed by the disappearance of the patient, leaving me in the dark about the improvement or otherwise of the asthmatic condition.

LEST YOU FORGET

TO

FILL IN & RETURN



THE BLANK FORM OPPOSITE.