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VOL. VI

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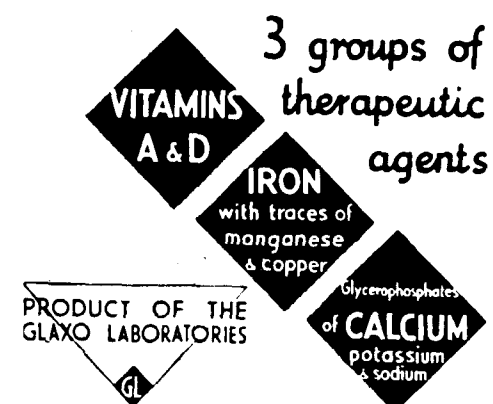
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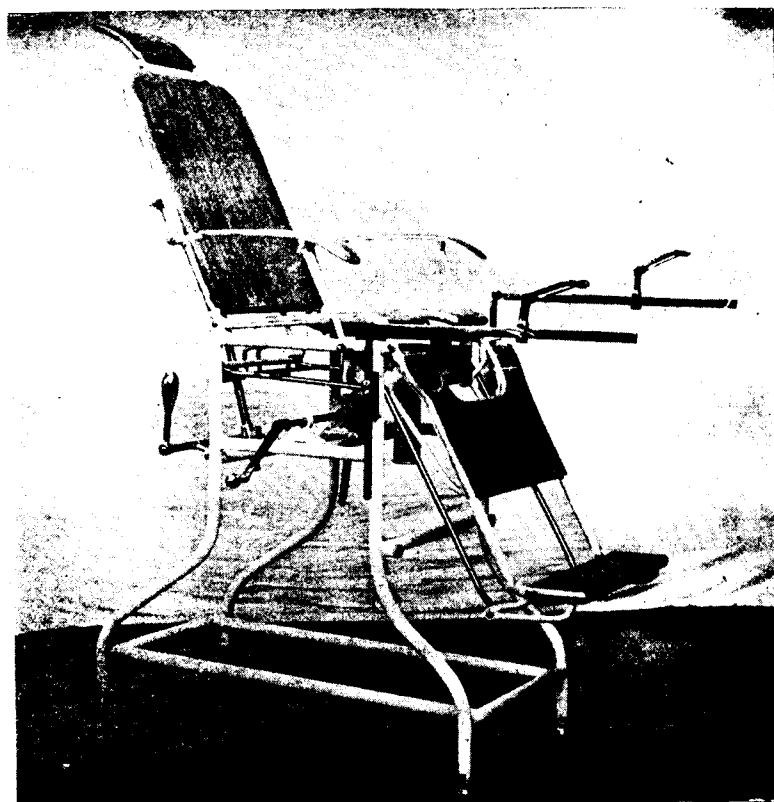


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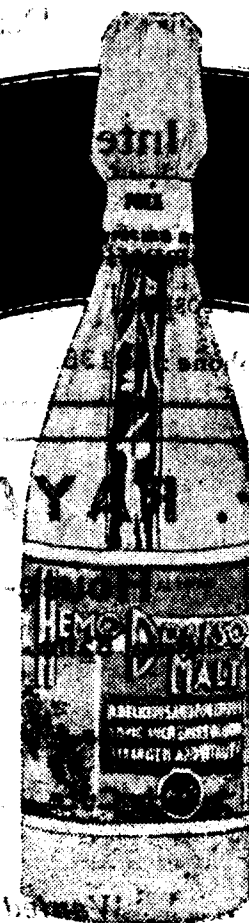
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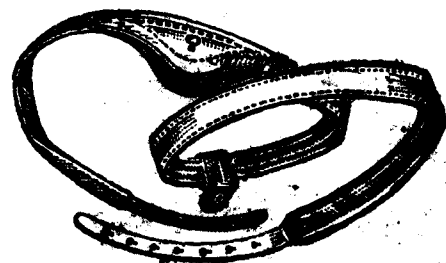


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VOL. VI

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MEDICO-SURGICAL SUGGESTIONS

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CHRONIC BRONCHITIS AND BRONCHIECTASIS IN CHILDREN

BY DR. AHMED KHALIL ABDEL KHALIK, M.R.C.P.

Assistant Physician, Children's Section, Faculty of Medicine.

Chronic affections of the bronchi are less frequent in children than in adults and less so than in old people; however, one has to keep in memory that they are not at all exceptional. These chronic affections of the bronchi present themselves under two aspects:—

1. Simple chronic bronchitis, and
3. Bronchiectasis

There are certainly many transitional types in between the one and the other.

It is certain that once the bronchi are chronically inflamed they have a tendency to dilate especially in infants, but it seems more convenient from a clinical point of view rather than from a pathological one to stick to the above classification and we consider a case as simple chronic bronchitis where the lesions seem to be uniformly spread in both sides of the chest although in the P. M. we may find some few dilatations. But if the lesions are more or less localised and fixed and more so if signs of cavitation can be revealed by the stethoscope we classify these as bronchiectasis.

SIMPLE CHRONIC BRONCHITIS.

Chronic bronchitis used to be considered as an occasional occurrence in the course of other diseases, as chronic broncho pneumonia, pulmonary tuberculosis or bronchiectasis. It was between the years 1884 and 1886, that Comby of Paris drew the attention to the fact that chronic bronchitis can exist alone in babies and children. As a matter of fact, simple chronic bronchitis can occur at any age and has been reported by Bouchut to occur in the first few months after birth, but rare as it is in this early part of life, it is most frequently met with between two and five years of age and is usually the end affection of repeated attacks of acute bronchitis whether simple, i.e., due to cold or specific as in influenza, measles or whooping cough.

In the majority of such cases, one can easily find on examination a lesion which is the real cause of the repeated attacks of

bronchitis. This predisposing cause may be a local one, lying within the respiratory system, acting as an obstacle in the way of the air inspired and in the way of the bronchial secretions being voided, such as adenoids or big tonsils. Nearly 50 per cent of all babies and children with chronic bronchitis have such an affection. Besides acting as an obstacle in the way of the respiratory canal, adenoids and tonsils constitute a constant focus of infection that feeds the respiratory tree by descending pus. Another fairly common cause are enlarged mediastinal glands, tuberculous or otherwise, pressing on the nerves and bronchi, troubling their vaso-motor innervation and thus favouring infection. Other local affections are those of the nose, as deviation of the septum and chronic rhinitis.

Scrofulous and arthritic children are very much predisposed to this chronic affection of the bronchi; many such babies present the scrofulous appearance with chronic coryza, blepharitis and enlarged glands in the neck, so much so that the ancient writers have written much about what they called scrofulous bronchitis. Descendants of arthritic, asthmatic or eczematous parents are frequently affected with chronic bronchitis, and in these, the cough assumes frequently the asthmatic type. The connection between this asthmatic type of chronic bronchitis and eczema has been noted in children having both lesions, where, if the eczema is attenuated under treatment or otherwise, the bronchitis is aggravated and *vice-versa*, the cough is relieved once the eczema is again flourishing.

Rickets with the big belly and chest deformities constitute a favourable ground for the catarrhs of the chest and for these to prolong themselves. The common occurrence of large tonsils and adenoids may be an additional factor.

PATHOLOGY.

In the P. M. of such cases one can see that the bronchial mucous membrane is thick, congested and grey in places and is covered by a layer of mucus or muco-pus. The peri-bronchial tissue is thick and one might come across areas of chronic broncho-pneumonia around some of the bronchi. The presence of these lesions was the cause of thinking that chronic bronchitis is simply an accompanying lesion of chronic broncho-pneumonia, but the predominance of the chronic catarrh and the scarcity of the accompanying broncho-pneumonic changes made it definite, as shown by *Comby*, that chronic bronchitis is really a medical individuality in children.

Under the microscope the epithelial cells are swollen and many of them are transformed into cubical cells. The glands are prominent, the chorion is infiltrated with round cells but the rest of the layers are respected so long as the condition has not proceeded to actual bronchiectasis. Around the affected bronchi, chronic alveolitis, may be present and is due to the infection proceeding from the bronchi to the neighbouring alveoli.

The micro-organisms that might be met with are exactly the same as observed in acute bronchitis, e.g. streptococci, staphylococci, pneumococci, pneumobacilli, etc.

A salient fact, noticed in doing the P. M. of such babies, is the absence of emphysema in contrast to the findings in old people, in whom chronic bronchitis is always accompanied by chronic emphysema. The cause is that in infants the pulmonary tissue is young and malleable, and is easily distended under expiratory efforts but comes back to its original form quite soon, and although acute emphysema is common in nearly all the acute affections of the lungs in babies, yet chronic emphysema with induration is quite rare.

The mediastinal glands are usually enlarged either due to the constant draining of the affected bronchi or more frequently due to the tuberculous nature of the affection.

SIGNS AND SYMPTOMS.

The symptoms presented by a child with chronic bronchitis differ according to the stage of the disease, either at its onset or when it gets quite established, or during one of the acute exacerbations.

The onset of these cases is usually marked by a series of acute attacks and the common state of affairs is as follows:—

A baby between two and five years of age, after an attack of measles or whooping cough, is affected by a severe attack of acute bronchitis, or by an attack of broncho-pneumonia, lasting three or four weeks. One or two months later, due to some slight cold or mild nasal catarrh, appears a new attack of acute bronchitis which remains for a few weeks, then the attacks of bronchitis follow each other without an apparent motive. During the winter the baby has some five or six attacks of rather severe bronchitis and in between them the child seems not to be absolutely cured. Chronic bronchitis is thus established.

The physician is usually called to see such baby either during the acute attack or during the quiescent period.

During the quiescent period the cough is a marked sign that attracts the attention of the parents. The baby coughs more by night and on getting up in the morning due to the accumulated secretions that collected during the night. It is a wet cough and generally not spasmodic, occasionally it might be so, especially if it is the result of a previous attack of whooping cough or the presence of enlarged mediastinal glands. The cough is induced by fatigue or cold and is ameliorated by rest and warmth. In children above six years of age, the cough is accompanied by the expectoration of an abundant muco-purulent, more or less yellow secretion. Besides the cough there is practically nothing, the respiration is normal, dyspnoea is absent, although it is easily induced by fatigue; such babies get easily out of breath and do not like to run and play with their playmates, but the apparent general condition is quite perfect.

glands or chronic pharyngitis. All these can be excluded by careful auscultation.

In the very severe cases of bronchitis with expectoration one might mistake the condition for bronchiectasis, but here one can find a fixed focus or foci with signs of cavitation.

TREATMENT.

In the treatment of chronic bronchitis in babies and children, it is very necessary to treat or remove all the predisposing causes mentioned. Besides this, the baby should avoid crowded localities where the air is full of irritating dust and suspended inert particles which will irritate the bronchial mucous membrane. Living in places where the air is pure, as in the country or at high altitudes, will help much towards a quick cure.

Besides, the children should avoid eating any irritating food such as spices.

Humid air being much less irritant than dry air, it is advisable to saturate the atmosphere of the room by water vapour saturated with eucalyptus oil or compound tincture of benzoin.

The drugs used in cases of chronic bronchitis are those that modify the bronchial secretions as creosote and its derivatives, balsamic medicines as terebenthine, terpine, therpinol, etc., and sulphur.

Creosote is a good sedative for the cough and a powerful antiseptic and modifies the bronchial secretion, but it cannot be held by a delicate stomach and so is contra-indicated in cases with vomiting. It might cause as well congestion of the lungs and kidneys and should not be given where there is congestion of the lung or albumin in the urine. The dose is 0.10 per day and per year of age, and is usually given with cod liver oil, as follows:—

Creosote	...	0.10
Cod liver oil	...	15.00

5 c. c. T. D. S.

Guaiacol in the dose of 0.5 and thiocol in the dose of 0.50 can replace creosote.

Terebenthine and its derivatives terpine and therpinol are the best modifiers of the bronchial secretion and they can dry the bronchi very quickly and efficiently. The following are examples of the prescriptions given for a baby one year old:

Tincture of eucalyptus	...	0.20
Syrup of terebenthine	...	3.00
Syrup of toluen	...	3.00
Water to	...	15.00

5 c.c. T.D.S.

Sodium benzeote	...	0.10
Terpine	...	0.95

Syrup of tolu	...	1.00
Simple syrup to	...	15.00

5 c.c. T.D.S.

Sulphur is a good medicine for drying the secretion. It is given as follows:—

Sulphur flour	...	0.15
Honey	...	15.00

5 c.c. T.D.S.

Hyposulphite of sodium	...	0.15
Simple syrup to	...	15.00

5 c.c. T.D.S.

Vaccinotherapy is of great use in cases of chronic bronchitis and an autovaccine should be made from the flora present in the sputum and given to the baby in increasing doses every other day. This last method nearly always succeeds where other methods have failed.

BRONCHIECTASIS.

Bronchiectasis is not a rare disease in infants and children. It is true that it is less frequently met with than in adults and old people, but still it is far from being exceptional. It is interesting to say here that the first case of bronchiectasis ever published in medicine was that of *Laennec* in 1818, and it was in a child three and half years old. That one's attention is not attracted to diagnose bronchiectasis in the young is due to the fact that it does not produce all the symptoms and disabilities present in cases of advanced age, it is not very net, and may be quite latent. Moreover, it is in children that it may improve or even disappear altogether, i.e., be self-cured. Still, if one looks for it during life and in the P. M. room, one will come across cases now and then.

The following is the history of a case which I have seen lately.

It was a boy, one and a half years old, admitted to the hospital complaining of vomiting which occurs only in the morning after the first breast-feed; the vomiting is the result of cough which is followed by expectoration of sputum tinged with blood. The child was emaciated and pale.

His mother said that 25 days before admission the patient had swollen glands of neck with difficulty in breathing. The glands were incised. There was a history of cough with high temperature for 15 days last year (most probably broncho-pneumonia). The temperature disappeared, but the cough continued till the time of admission. Blood in the sputum appeared only twelve days before admission.

As for the family history, the father was absolutely healthy with no history of syphilis. Mother showed a scar in the neck which is the remains of an operation for glands of the neck removed nine years ago. The baby has two step-sisters, both died from diphtheria. The mother said that her baby has been with a neighbouring child

who was suffering from cough with blood and sputum for one month. It died, some twenty days ago.

On examination, the baby was emaciated, weighing 7 kilos 440 grms. instead of 10 kilos, 500 grms., i.e. 3 kilos less than the average. On examination of the chest, limited movement of the lower part of the left side was noticed with the indrawing of the fourth, fifth and sixth intercostal spaces. The apex beat was in the fourth space just outside the nipple line which is normal at this age. On palpation, diminished tactile fremitus was evident over the left lower part. Dullness has been quite definite on the left base in front and back. Heart area was normal. On auscultation, diminished breath sounds were detected on left base with crepitation and bronchial breathing. These used to vary from time to time. The right side of the chest was quite normal to our means of investigation. The fingers were clubbed. Pulse and temperature were quite normal during the three weeks the baby has been in the hospital.

From the history and examination, tuberculosis was suspected and the sputum has been examined on several occasions without a positive result. The examination of the stomach wash and stools was negative as well. The amount of sputum expectorated was 80 c. c. daily on admission but it improved and in the few days before discharge, the amount came down to 50 c. c.

An X-ray of the chest was taken, and the picture showed a big shadow in the left base with many clear spots spread here and there. This appearance in itself gave us the idea that bronchiectasis was most probable although it is quite rare for bronchiectasis to give any definite picture on X-raying without lipiodol.

10 c. c. of lipiodol have been injected intra tracheally under chloroform while the baby was lying on its left side. An X-ray photo was taken while the baby was lying down and it showed the lipiodol in the trachea and left bronchus and filling an enormous number of cavities specially in the lower lobe. An interesting fact is that the upper lobe which in the previous picture without lipiodol appeared quite clear showed after lipiodol a good number of cavities.

Two days later another X-ray, taken in the vertical position, showed a most beautiful picture of multiple dilatations full of lipiodol.

The baby was treated by guaiacol cacodylate injections and postural treatment. There was slight improvement in the general condition; the patient increased 40 grams during the first two weeks of residence in the Hospital; the sputum became less and less but was always tinged with blood.

Four weeks after his admission the child developed signs of toxæmia; diarrhoea was established, vomiting was incessant, the heart was very rapid with weak pulse, the skin was dry with definite dehydration. The mother insisted on its being discharged. I have not heard of the case since then.

THE ÆTIOLOGY OF BRONCHIECTASIS.

Bronchiectasis can occur at any age. Besides congenital dilatations detected at birth, the acquired form has been met with at the age of eleven months and eighteen months, but usually it is between three and five years of age that we meet with the majority of our cases. The case I have just related is interesting from the point of view of age. The child was only eighteen months old.

The congenital dilatations of the bronchi are caused by some interference during the development of the different elements of the lung. Usually such cases die directly after birth, but some have lived for a few years, others have even lived to the age of sixteen. In the P. M. cysts are seen in the places where cavities have been detected during life, these are simply the congenitally dilated ends of the bronchi. One should always think of congenital syphilis in such conditions.

Acquired bronchiectasis may be the result of the presence of a foreign body in the air passages. Behind such a body, the bronchial secretions accumulate and the stasis of such secretion favours the infection of the bronchial wall. Suppuration sometimes results at the site of the foreign body; the pus thus formed cannot be evacuated. The continued catarrh of the bronchi below the foreign body affects the walls that lose gradually their elasticity and dilate.

Experiments of a similar nature have been done on animals by letting them inhale some iron particles with the same result (Bronchiectasis).

Foreign bodies met with in the bronchi of babies are of varying nature, as stones of fruits, pieces of stone, buttons, small pieces of toys, orange pips, etc.

But the most common cause of bronchiectasis is broncho-pneumonia.

As a matter of fact, the bronchial changes alone, as seen in simple chronic bronchitis, cannot produce enough disorganisation of the wall to cause dilatation, the pulmonary tissue in the neighbourhood must be as well affected and lose its elasticity and resistance and thus let the bronchi dilate and yield to the mechanical pressure of cough.

In adults, the constituent elements of the bronchi are resisting and they can be considered more or less as rigid tubes, this is why prolonged diseases of the lung with strong cough affect the parenchyma rather than the bronchi; emphysema in such cases is more evident and commoner than bronchiectasis. In children, on the other hand, the bronchi have thin walls and they yield before the mechanical effort of cough.

The broncho-pneumonias that cause bronchiectasis are the sub-acute prolonged types. In the acute ordinary type, enough time is not given to disorganise the structure of the bronchi. In the past

history of such babies we usually come across a history of a complicated whooping cough, measles, influenza, typhoid, etc. followed by a sub-acute broncho-pneumonia.

It is not at all of great importance to know the exact part played by the bronchial wall or the lung tissue in the production of bronchiectasis. In the great majority of cases both parts are affected, and in practically every case there is affection of the bronchial wall with a chronic pulmonary process, i.e., cirrhosis.

Enlarged mediastinal glands pressing on the bronchi can produce dilatation below the pressure point just as the foreign body.

Chronic fibrous pulmonary tuberculosis is a common cause of bronchiectasis in adults. This type of tuberculosis does not exist in children, because tuberculosis kills the babies before any fibrous transformation could occur. What occurs in children is rather the grafting of tuberculosis on bronchiectasis, the chronically inflamed bronchi being a good ground for the tubercle bacillus.

Some investigators think that the original infection, which caused the bronchial lesion and bronchiectasis, is not coming from the cavity of the bronchi but through the lymphatics and the blood stream. The micro-organisms thus conveyed should be of a special nature, a type capable of causing sub-acute inflammation, as certain types of streptococci and staphylococci. This view explains the rarity of bronchiectasis compared with the frequency of broncho-pneumonia.

Congenital syphilis is really a predisposing factor to bronchiectasis and congenitally syphilitic children develop this condition after broncho-pneumonias more than other children. This was definitely shown by *Prof. Hutinel*. It seems that the spirochaete prepares the ground for the other micro-organisms. Practically 60 per cent of the children with dilatations gave positive Wassermann reaction.

MORBID ANATOMY

At the P. M. the anterior part of the lung looks healthy. There are many pleural adhesions. The mediastinal glands are usually enlarged and inflamed. The parts affected with bronchiectasis are usually in the inferior lobe, more frequently on the left side. They are hard to the touch, heavy in weight and congested. Their structure is dense and fleshy as in the case of lungs with chronic broncho-pneumonia. On section, one sees a number of more or less round openings giving the appearance of 'gruyere cheese' and from these openings flows a yellow-grey purulent fluid.

Different types of bronchiectasis are met with in children:

1. The moniliform type, consists of a series of successive dilatations of one bronchus. It is quite rare in children.

2. The fusiform type is the most frequent type met with in children. It is always the sequel of broncho-pneumonia. It is the type which is liable to self-cure.

3. The sacciform or ampullary type, is the most characteristic type of bronchiectasis. It gives rise to the maximum signs and symptoms. In this type one finds round or oval cavities variable in their sizes. Sometimes a terminal bronchus ends in a considerable dilatation in the form of a cul-de-sac.

It is this last type that might be often mistaken for tuberculous cavitation. The site of the cavity not being at the apex is not against tuberculosis, because in children, tuberculosis begins frequently near the hilum. It is only by the histological examination of the walls of the cavity, to see the remains of the bronchial wall in cases of bronchiectasis or to discover the tubercle bacillus in the contents of tuberculous cavities, that one can decide the real nature of the cavity.

The distribution of such cavities may be:—

1. *Generalised*, which is the rarer type. The case I have related is interesting from this point of view.

2. *Localised*, which is the commoner type.

Bronchiectasis affects the bronchi of medium and small calibre, because the big bronchi having nearly a complete ring of cartilage do not dilate under mechanical efforts.

The dilatations are mostly met with at the bases, but can occur at the apex as well.

Under the microscope the epithelium of the bronchi might be lacking completely in places, or might lose only its cilia and become cubical, the chorion is thickly infiltrated with round cells, in the submucus tissue the capillaries are dilated.

The smooth muscular fibres are atrophied in the dilated areas, the elastic fibres resist much but end by disappearing, the cartilage is destroyed, the lung tissue around shows chronic pneumonic changes and peribronchial sclerosis.

The micro-organisms found in the cavity are more or less the same flora as seen in tuberculous cavitation, streptococci, staphylococci, pneumococci, pneumobacilli, etc. These germs are the cause of the intoxication seen in these babies.

SYMPTOMS

The onset of bronchiectasis is usually insidious and the beginning if the condition cannot be definitely limited. On asking the parents about the past history of the case, one finds that the child has been treated for bronchitis or broncho-pneumonia that was the result of an attack of measles, influenza or whooping cough. This broncho-pneumonia was rather long in duration and the cure was never complete. The child coughs ever since, and, if more than five years of age, expectorates some sputum.

The disease once established is characterised by cough and expectoration, but above all by the physical signs.

The cough is wet paroxysmal accompanied sometimes by vomiting, it is quite marked in the morning when the baby is just awake and sits up. The secretion, collected during the sleep in the horizontal position is evacuated at once when the child assumes the vertical position.

The morning expectoration is the most characteristic symptom of bronchiectasis if it is present, and as a matter of fact, it does exist in the majority of cases, but in young children less than five years of age, it might be absent if the condition is mild and the amount of the sputum is small, because babies under this age swallow their sputum and do not spit it out.

The amount of sputum expectorated in 24 hours might be considerable; and, if collected in a glass, stands in three layers as in adults, a superficial frothy layer, a middle layer of clear fluid, and a deep layer of thick purulent green fluid, rich in pus and elastic fibres.

The foetid odour of the breath, which is due to the fermentation of the pus by the ordinary micro-organisms, is not always present in babies.

Haemoptysis, which is due to the richness of the bronchial walls in new and fragile blood vessels, is quite rare in babies. My case is interesting from this point of view.

The physical examination is very important because through it one can discover local signs of the utmost importance especially in the cases where the symptoms are quite mild and in young babies who do not spit and where the general condition is quite perfect in spite of the disease.

On inspection one notices frequently a retraction of the chest wall over the affected area, this is due to the pleural adhesions usually present. With the retraction we usually get limited movement of the part affected.

On palpation, the tactile fremitus is sometimes increased at the base due to the induration of the lung tissue. In other cases it is diminished or absent if the cavities are full because the liquid in the cavities will drown the sound. A thickened pleura will abolish the tactile fremitus altogether.

On percussion one notices a dull note or an area of impaired resonance due to the induration of the lung or the thickened pleura. If the cavity is big, superficial and empty, a tympanic note will be elicited.

On auscultation one hears humid rales, sometimes with signs of cavitation; such signs differ according to whether the cavity is empty, giving a cavernous breathing, or completely full, resulting in respiratory silence.

The general condition of the baby is relatively good compared with the definite lesions that one defines by the stethoscope. This is rather a special character of bronchiectasis. The temperature is normal, appetite is good, digestion is perfect, the face is rosy, so long as there is no complication. The general condition remains good because the pus contained in the bronchial cavity is surrounded by a thick coat of fibrous tissue which does not allow the toxins to be absorbed or the microbes to pass and so the pus is kept out of the economy of the body, but if at any moment, a fissure or rupture occurs in the wall it allows micro-organisms to get into the circulation, setting up septicaemia and its symptoms.

DIAGNOSIS.

The diagnosis of bronchiectasis is often difficult. *Dr. Comby* of Paris said that one should often think of bronchiectasis in order not to miss it, especially in the cases that might simulate it, as chronic bronchitis, acute broncho-pneumonia of abnormal type, chronic broncho-pneumonia, purulent pleurisy or tuberculous breaking down of the lung, because under any of these etiquettes, bronchiectasis might be the real condition.

The differential diagnosis between chronic bronchitis and bronchiectasis is, in many cases, quite difficult; it is quite true that chronic bronchitis usually ends in dilatation, but this change occurs gradually and in many cases is only discovered at the P. M. During life one should think of bronchiectasis in such cases where the physical signs predominate in some fixed area of the lung, especially if there is impaired resonance or dullness or crepitation showing implications of the lung tissue.

Naturally, it is the cases on the way of transition between chronic bronchitis and bronchiectasis that always are most difficult to diagnose.

In case of acute exacerbation on top of an old bronchiectasis, the signs in the chest are so much and so intense, that one cannot help thinking of acute broncho-pneumonia; it is the general condition of the baby, which remains perfect in spite of the apparently severely affected chest, and the rapid cure leaving only the old signs, that put one on to the right diagnosis. Here is an example:—A girl, ten years old, ill for the last 45 days, has been treated by her doctor for double broncho-pneumonia. The girl used to cough for a long time before the attack and used to get such acute attacks every now and then. Both bases of the lungs gave impaired resonance with tubular breathing and crepitations. The condition seemed to be a case of double broncho-pneumonia of the pseudolobar type, but the temperature was slightly raised 37.8°C , the pulse was 100, the appetite was good and dyspnoea quite moderate. Gradually the condition improved and the child was cured of the acute attack; the case was acute bronchitis on top of an old bronchiectasis.

A much commoner mistake is that a case of bronchiectasis is diagnosed as chronic broncho-pneumonia, especially in the cases where the lung fibrosis is more widespread and the dilatations of the bronchi are small and limited. In reality this is not a mistake because bronchiectasis cannot exist without chronic broncho-pneumonia of the neighbouring lung tissue. The association of these two affections in children is exactly like the association of chronic bronchitis and emphysema in adults.

There are some cases of bronchiectasis that can be easily mistaken for purulent pleurisy. *Dr. Comby* has reported a case of a boy of nine years who showed an area of definite dullness in the region of the interlobar space of the left lung with some râles and was diagnosed as interlobar pleurisy. An incision was done in the left lung after resection of a rib but no pus came out of the pleural cavity. It was a case of bronchiectasis.

The following observation from the records of the Foundling's Hospital in Paris shows how careful one should be in the diagnosis of purulent pleurisy. A girl, six years old, affected with left broncho-pneumonia for some time, with bronchial breathing, crepitations and dullness over quite a big area; the general condition was bad, fever was high with big oscillations. A few days later the dullness in the area affected was so complete that collection of pus was suspected. Aspiration was done but no fluid came out; however, the left side seemed to retract slightly, and the dullness persisted. Another aspiration was done but without any result. The child died one month later and at the P. M. there was no purulent pleurisy, the lung tissue was dense and traversed by dilated bronchi, some of them were as big as the little finger.

On the discovery of signs of cavitations in the chest of a baby, one cannot help thinking of tuberculosis, but the most distinctive sign is that in tuberculosis with cavitation, the general condition is very bad, whereas in bronchiectasis without complications it is fairly good. The examination of the sputum for tubercle bacilli and, if negative, the inoculation of a guinea-pig will detect the tuberculous nature of the affection. X-ray is of outmost help in such conditions.

When one suspects from the signs or symptoms the presence of bronchiectasis in a baby, an X-ray of the chest should be done. An X-ray without lipiodol does not usually give a good picture, because the cavities are mostly small and the walls are not so dense. Radioscopy gives better information. The contrast between what one hears by the stethoscope and what one sees is striking. One expects from the physical signs heard to see many cavities and extensive consolidation, but, as a matter of fact, one sees nothing or practically nothing, at most an area of a denser shadow than normal with some radiating lines from the hilum that denote the sclerosed bronchi, perhaps occasionally some areas with a clear centre and a

dark periphery. This radioscopic examination helps one as well to see the limitation of the movements of the diaphragm or the displacement of the heart.

To see better, and in a definite way, lipiodol must be injected intra-tracheally after the method of *Sicard*, and by this method one can easily distinguish during life the type of dilatation and separate bronchiectasis from cavities due to other causes, as tuberculosis, because such cavities usually communicate with the bronchi by narrow fissures that do not allow the lipiodol to pass in. The quantity of lipiodol injected is 10 c.c. for babies. It is injected by a special syringe between the cricoid and thyroid cartilages. The best picture offered is that taken when the baby is sitting up, where the cavities show themselves half full with a horizontal upper surface. Many of them may be grouped together like a bunch of grapes. Lipiodol intratracheal injection will reveal in the great majority of cases any bronchiectasis present, yet a negative result is not with certainty against its presence. Perhaps for some reason or other the lipiodol has not found its way to the bronchus in the territory of which the dilatation occurs. Naturally this occurs in cases of small dilatations limited to a small part of the lung.

COURSE AND PROGNOSIS.

The disease is slow in its course and may take years. Acute exacerbations occur every now and then, with fever and signs of generalised bronchitis. Sooner or later new symptoms appear which show the effect of absorption of toxins from the walls of the bronchiectatic cavities and the limitation of the field of oxygenation of the blood due to the accompanying sclerosis. Dyspnoea becomes apparent after any effort, the right heart begins to dilate. Cyanosis of lips and extremities occur, clubbed fingers are apparent; this last change is due, as well known, to the hypertrophy of the soft parts without any alteration of the bones and is due to the cyanosis, it is frequently met with in congenital heart disease.

The baby soon becomes cachectic, it gets thinner, the skin is dry, it loses its appetite and strength, fever is continuous, diarrhoea is established and the baby becomes marasmic and usually dies. Still, complete cure of bronchiectasis in children is quite possible, especially in the fusiform type because as the healthy bronchi increase in their calibre in their normal growth, the affected ones usually remain stationary in their diameter and a moment will come when both will be equal and thus all the signs and symptoms of cavitation disappear.

Some local complications may set in and lead to rapid death as pneumonia, broncho-pneumonia, tuberculosis, haemoptysis, purulent pleurisy and pyopneumothorax.

General complications can occur as well, in the form of septicæmia originating from the passage of organisms through the bronchial wall to the blood stream. They may be localised at any

part of the body producing metastatic abscesses of joints, bones, liver, endocardium, brain, etc.

General intoxication with its debilitating effects is of common occurrence.

TREATMENT.

The medical treatment of bronchiectasis consists in giving the drugs mentioned in chronic bronchitis. Surgically, artificial pneumothorax has been found to give good results, but the presence of adhesions interferes much with the performance of this method. Phrenectomy, causing the ascent of the corresponding side of the diaphragm for practically 5 cms. or more can press on the cavities at the base and has caused cure in some cases.

Postural treatment by putting the head of the baby down two or three times a day helps to empty the cavities completely.

Vaccinotherapy is quite important and helpful, an autovaccine should be made from the sputum of the baby.

If the Wassermann reaction is positive, antisyphilitic treatment should be given. Very good results may be obtained.

(*The Journal of the Egyptian Medical Association Jan. 1937.*)

TRACHOMA THERAPY WITH QUININE BISULPHATE

BY MR. ELIAS SELINGER, M.D.

Department of Ophthalmology, Rush Medical College, University of Chicago.

Treatment of trachoma by the local application of quinine bisulphate is based on the known pharmacological properties of quinine. When applied to mucous membranes it acts as an astringent, is mildly anesthetic and, being an alkaloid, it penetrates through the mucous membrane. It is a bactericide and, because it is a protoplasmic poison it destroys leucocytes and lymphocytes and inhibits the invasion of the tissues by these elements. The bisulphate is used because it is more water soluble than the hydrochloride, the sulphate and most of the other salts except the dihydrochloride.

The technique of the treatment is as follows: The conjunctival sac is anesthetized by instilling a drop of $\frac{1}{2}$ per cent pantocaine or 1 to 2 per cent butyn or some other suitable local anesthetic every three minutes until three or four drops have been instilled. The upper lid is then everted and a 10 per cent aqueous solution of quinine bisulphate is applied to the fornix and palpebral conjunctiva with a cotton wound applicator dipped freely in the solution. The same

process is repeated with the lower fornix and lower palpebral conjunctiva and with the plica semilunaris. One applicator is used for the upper fornix and upper palpebral conjunctiva and another applicator for the lower fornix and lower palpebral conjunctiva as well as the plica, so that four applicators are used in cases of involvement of both eyes. The applications are made with a firm rolling movement until the surfaces turn a milky-bluish color. No precaution need be taken to keep the solution from coming in contact with the cornea. The cornea should, however, not be injured by rubbing the applicators over it. For this reason the patient should be directed to look down while the upper fornix and upper palpebral conjunctiva are being treated and to look up while the solution is being applied to the lower fornix and lower palpebral conjunctiva. It is best to make the application of the quinine solution lightly for the first few treatments; later they are made with a little more pressure. Since a moderate amount of burning follows the treatment, cold compresses may be applied to the eyes after each treatment. The burning sensation diminishes with subsequent treatment.

This office or clinic treatment should be carried out twice, preferably three times a week until most of the papillary and follicular hypertrophy have disappeared. The frequency of the treatment is then decreased, but the treatment should be continued once a week until all evidences of trachoma have disappeared, and at two week intervals for another six months.

In addition to this treatment, an ophthalmic ointment of 4 per cent quinine bisulphate is prescribed for use at home twice a day, just before the patient retires at night and in the morning. Since the ointment produces moderate burning it is well to start with a tube of 2 per cent ointment at first, and when this tube has been used up and the patient has become accustomed to the burning sensation, the 4 per cent ointment is prescribed. The use of the 4 per cent ointment should be continued twice a day for six months after all evidences of trachoma have disappeared.

Pannus, corneal ulcer and corneal infiltration are no contraindication to this treatment. In fact, the quinine has a very definite beneficial effect on these complications. It reduces the photophobia by its anesthetic action, and by its action on the abnormal cellular elements hastens recovery. Atropin, hot compresses as well as dark glasses should, of course, be used in conjunction with the quinine when corneal complications develop.

Mechanical expression of follicles speeds the rate of recovery, as with other forms of treatment.

Among the incompatible drugs of quinine are copper, lead, zinc, mercury, iodides, bromides, tannic acid, alkalis, ammonia and lime water. Among the synergists are arsenic, iron, and mineral acids.

The treatment of trachoma with quinine bisulphate has been used routinely in the eye dispensary of the Rush Medical College for about 3 years and for about 2 years on some selected severe cases in the trachoma clinics in southern Illinois. The results so far show the quinine treatment of trachoma to be superior to other forms of treatment hitherto employed. The duration of the disease is shorter than with other forms of treatment such as with copper sulphate and chaulmoogra oil; the treatment can be carried on in spite of corneal complications; the latter are favorably influenced by this therapy, and the final visual results in cases with corneal involvement are better than with other forms of treatment because of the effect of the quinine on corneal infiltrates and old corneal opacities as described in a previous paper (2). The treatment is applicable in all forms of active trachoma and has produced good results in chronic cases that have lasted for many years under various other forms of therapy. In general, it may be said that the treatment should be carried on for at least a year in the average case, and for a correspondingly longer time in those more resistant to treatment. Recurrences are rare if the treatment is continued long enough, that is for several months after all objective evidences of trachoma have disappeared.

CONCLUSIONS.

1. The rationale of the treatment of trachoma with quinine bisulphate is discussed.
2. The technique of treatment is described.
3. Results indicate that this form of treatment is shorter than that with copper sulphate and chaulmoogra oil, that corneal complications are favorably influenced by it, and that the final visual results are better than with other trachoma therapy.

The Chinese Medical Journal Oct. 1936.

ACUTE OTITIS MEDIA IN CHILDREN

H. C. CHILDS, M.D.

Tulsa.

Middle ear infections among infants and children is second only to tonsillitis and indeed they are usually associated.

The incidence of its occurrence is greater among males than females. Children who have been well fed, clothed and housed are much less susceptible to upper-respiratory, accessory sinus diseases, and otitis media. The most frequent cause of this infection is either

a common cold, tonsillitis, influenza, scarlet fever, pneumonia or whooping cough. During the course of any of the above infections the attending physician should watch carefully for otitis media as a complication.

A correct diagnosis, especially among infants, is not usually made until spontaneous perforation and suppuration has taken place. Treatment at this time is of little value and more especially so in the hands of the laity or general practitioner. In order that correct diagnosis of otitis media be made early in the course of the disease it is necessary to have the co-operative efforts of the otologist and pediatrician. Without this co-operation many children are treated for various and sundry digestive disorders. Unfortunately in infants, the patient is unable to direct the physician to the site of pain. Older children are more fortunate in that they are able to make their complaints known, thus giving the physician the correct clue.

Too often children who complain of ear-ache are treated by the grandmother with sweet oil, or other eardrops, giving a false sense of security, until serious complications arise.

The first symptom of otitis media usually noted by the mother or nurse is some evidence of pain, characterized by crying, restlessness or pulling at the ear. The patient frequently refuses food and there is some elevation of temperature. Vomiting sometimes occurs. An examination of the ear with a well lighted otoscope will then show a drooping posterior wall, usually pointed, red and inflamed. This indicates increased pressure behind the tympanum.

TREATMENT.

If a case is seen before the drum membrane ruptures a myringotomy is usually indicated, certainly if the posterior wall is drooping. There will be pus and frequently gas will escape through the incision. A firm cotton pledget should be placed into the canal and left there for at least one hour in order to absorb the pus and blood which otherwise might fill the canal and prevent free drainage. A loose cotton wick may be used subsequently, changed as often as is thoroughly saturated which may be from one-half to one hour or longer. Irrigation and other local intra-aural medication is contraindicated at this time.

A general anesthetic should be employed, there being no satisfactory local anesthetic to my knowledge. It is cruel to hold little children by force and open the ear drum. I believe gas to be the ideal anesthetic, but it is not practical in general practice. I use chloroform in all cases but hesitate to recommend it to others, since but few of the younger men are trained in its use.

There are a few cases and circumstances under which the physician does not feel justified in giving an anesthetic of any kind or doing a myringotomy. The best treatment and one which may be

effective under such conditions is the application of a strong astringent, either epinephrin or ephedrine instilled into the nose for five or ten minutes then apply strong negative pressure which many times will drain the middle ear through the eustachian tube. This procedure should be applied twice daily as long as necessary. In addition to the above measures a mixture of fifteen drops of phenol to an ounce of warm glycerin should be instilled into the external auditory canal and held there by a pledget of cotton, repeated every four hours. Glycerin is a hygroscopic and phenol is an analgesic. Moist heat constantly applied to the external ear will give much relief. A safe and effective systemic analgesic is aspirin. It relieves pain and reduces fever. A child of two years will take two grains every two or three hours as needed. If the drum has ruptured before it is seen by the physician such measures as will promote free drainage should be employed. A cotton wick inserted into the external auditory canal as described by Platt, of Indianapolis is efficacious. It should be changed as often as saturated which in some cases is every one-half to one hour. Here again continuous moist heat is valuable. If drainage continues over eight weeks the condition is considered sub-acute or chronic. There are either granulations on the margin of the opening and may be in the middle ear or there are some mastoid cells infected.

A three to five per cent solution of zinc sulphate is the drug of choice in this complication. It is my practice to use an ordinary medicine dropper forcing the solution back and forth several times, instructing the patient to inhale deeply through the nose and exhale through the mouth. This procedure has a tendency to hold the eustachian tube open allowing the medicine to pass out through the mouth. Alcohol, saturated with boric acid is effective but too painful for practical use among children. A five per cent solution of tannic acid may be used if there is any objection to the zinc, which is also painful.

Treatment should be applied at least once daily by the physician.

The above measures are usually satisfactory but in some cases I have found it necessary to alternate with a two to four per cent silver nitrate solution. In some instances one may over treat these cases as evidenced by lack of improvement. In which case suspend all medication and use only the cotton wick.

If after recovery from the otitis media there is a large perforation left in the drum, the patient will complain of a discharge from the auditory canal subsequently during an attack of acute upper-respiratory infection; this is due to mucous being forced through the eustachian tube from coughing. The condition improves as the patient grows older.

Extracts.

THE RELATIONSHIP OF ASTHMA TO NASAL PATHOLOGY

IRVING MUSKAT, M.D., Chicago, *The Eye, Ear, Nose and Throat*, Monthly, October, 1936.

This relationship has been a subject for controversy many years. No one seems to question but what there is a close association between the two but what it is few agree upon. In a review of the experiences of the clinician, the physiologist and the pathologist, one finds quite an array of methods in practice for the control and treatment of the condition. Allergy in relationship to nasal pathology is first discussed. This brings up the clinical and histopathologic study of vasomotor or hyperaesthetic rhinitis, hay-fever, bronchial asthma, catarrhal rhinitis and sinusitis, nasal and paranasal polypi and edema, and hyperplastic sinus disease. He says these conditions only signify various stages of the same fundamental disease—hyperaesthetic rhinitis representing the early stage and hyperplastic sinusitis or polyposis the advanced stage.

There are many theories advanced but the author states that we do not know what allergy or anaphylaxis is. Because it is thought that specific antigen fails to produce enough anti-antigens or anti-amino acids to render the foreign protein harmless, some, attempt to identify this foreign protein and then immunize the individual by injections or withdrawal of the offending protein or both. When the subject of bacterial allergy is discussed the issue becomes yet more confused. Other factors such as heat, cold, friction, light, psychic status, and others we do not yet realize enter into this debatable subject.

Horton and Brown found that the constitutional reactions produced by cold were the same to those of histamine, and consequently decided that the physical as cold might break down certain proteins in the body and liberate the histamine-like bodies.

Much time and effort has been spent in trying to locate an etiologic factor in the nose to account for bronchial asthma. Bacterial infection, non-bacterial allergy, and the neurogenic theories have been advanced and used, each more or less successfully. The author says "the trouble in coming to a sane fundamental mode of thinking, however, was because the above facts as regards the mechanism of allergy has been ignored in the effort to prove one point for every thing."

If there is a definite nasal pathology in the presence of the bronchial asthma, it is obvious that the disease must be eliminated. He reminds us that an allergic nose at one examination may appear wet and boggy, with sinuses dark on transillumination, the Ipiodine

injection indicating polyposis and on a subsequent examination may appear practically normal. Surgery in such a case is surely contra-indicated. It should be kept under observation for sometime and carefully studied. If there is polypoid tissue present then adequate surgery must be done to bring about proper aeration and drainage.

A Caldwell Luc operation is the only one that will bring relief if in the antrum there is a chronic purulent hyperplastic disease.

Different men claim success in the care of asthma with a variety of drugs and treatments. Some of these as mentioned in this article are: tuberculin, calcium, sodium iodide, thyroid, vaccines, peptone, diathermia and cauterization of the nasal mucous membrane.

Chevalier Jackson is quoted: "All who wheeze have not asthma." Bronchiectasis with a chronic purulent and polypoid sinus disease may be the cause.

In closing the author states: "that the diagnosis and treatment of asthma with its relationship to nose and throat conditions depends on the intelligent interpretation of the history of the case, the course of the disease, the findings without the dogmatic, narrow, single method of attack."

MORPHINE AS AN AID IN DIAGNOSING ACUTE ABDOMINAL AFFECTIONS

BY HARRY A. SINGER, *Chicago III.*

The American Journal of Surgery, October, 1936.

The author says that it is universally taught that morphine should not be administered to a patient with an acute abdominal affection until the diagnosis has been established or at least until a decision as to whether or not to operate has been reached. The objection to the drug during the diagnostic period is that the narcotic "masks" the clinical picture. As a matter of fact the only sign, symptom or laboratory test which is affected by the morphine is the pain and its related manifestations, principally rigidity and hyperesthesia.

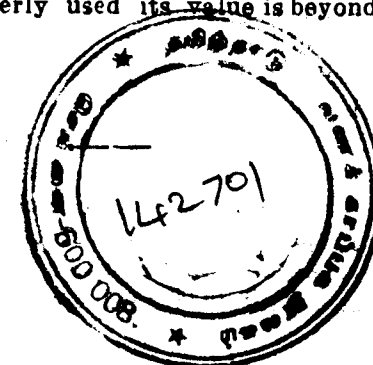
By virtue of the fact that the alkaloid relieves or moderates pain and removes thereby, in part at least, the abdominal wall resistance and the hyperesthesia, morphine is often most helpful in the diagnosis of acute abdominal affections. When the suffering of the patient is great, a trustworthy and adequate history cannot be obtained without first employing a narcotic to assuage the agony

When the physical signs are difficult to elicit or are equivocal the administration of morphine permits a much more satisfactory examination. After its administration a small or moderate size mass in the presence of diffuse rigidity accompanied by hyperesthesia can be made out; the point of localized tenderness can be more accurately determined; that portion of the abdominal wall which is most rigid can be determined; with relief of the spontaneous pain the hyperesthesia is more or less removed permitting the examiner to determine the true degree of tenderness which is proportionate, other things being equal, to the severity of the inflammation present.

A disadvantage of the method is admitted by the author to be danger that a patient may be deceived by relief from pain. For this reason he thinks that care should be taken to apprise the patient of the selective effect of morphine on the pain and of its failure to influence the course of the disease. Another objection which might be raised against the use of morphine in the prediagnosis period is in the cases of intestinal obstruction.

The procedure of the author is as follows: "The ordinary case is handled in the customary manner. If, however, the patient is unable to co-operate in the taking of the history or in the making of the physical examination on account of the severity of the pain, a sketchy history is obtained and a preliminary examination made and the observations recorded. Morphine grains $\frac{1}{4}$, or its equivalent, dilaudid grains 1 20, is injected INTRAVENOUSLY. The effect is very prompt and striking. An adequate history is now obtained and a complete, careful physical examination can be done. Observations made before and after morphine can then be compared."

In addition to aiding the examiner in arriving at a correct interpretation of symptoms, morphine administered early in the diagnosis period spares the patient the unnecessary suffering and renders him a better operative risk. Morphine is conceded to be one of the most effective therapeutic agents in counteracting the effects of "shock" haemorrhage and also peritonitis. From what has been said it is quite clear that the author has not deprived himself and his patients with acute abdominal affections the benefits of morphine and in the words of Moynihan. "Many of us have been frightened of the drug, quite needlessly, for properly used its value is beyond question."



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Medical News and Notes

RURAL MEDICAL RELIEF.

STATE-AIDED DOCTORS' CONFERENCE.

Surgeon-General's Opening Address.

"The predominant note must always be that of a certain amount of sacrifice on your part towards the problems of India, and I say this that until individuals, young individuals, give a great deal of their time and leisure and service for the service of their country, it will get on very slowly". With these observations, Major-General Sir Frank Connor, Surgeon-General with the Government of Madras, opened this afternoon the Sixth Madras Provincial Subsidised Rural Medical Practitioners' Conference held at the Y.M.C.A. Auditorium, Esplanade. Dr. V. Rama Kamath, Editor, *The Medical Practitioner*, presided.

Welcome Address.

Mr. K. Vittaldas Pai, Rural Medical Practitioner, Pallavaram, Chairman of the Reception Committee, welcomed the Surgeon-General, the President elect and the delegates.

In the course of his address, Mr. Vittaldas Pai said that it was about twelve years ago that the late Raja of Panagal started the Rural Medical Relief Scheme. At that time the finances of the Government were not bright and it was agreed to give a small subsidy to the rural medical practitioners. Now when the finances were better and money was available for rural reconstruction work, the Government could certainly increase the subsidy. The Rural Medical Practitioners' Association was started, a few years after the introduction of the scheme, by the late Dr. S. Ramasubba. For want of support from the practitioners themselves, the Association could not do any tangible work. After Dr. Ramasubba's demise some of the members felt that the Association must be revived and the present conference was the result of that feeling among the rural medical practitioners that their position must be made more secure from the onslaughts of officials at the head of District Boards and departments of the Government, so long as they were doing their work conscientiously. The agreement which the rural medical practitioners had to sign under penalty of losing their subsidy brought their service into line with regular Government service but without the advantages pertaining to it. Some of the practitioners felt that if the Government were keen on the service being made a pucca one, they ought to pay the practitioners at least a minimum of Rs. 100 per annum, with provision of a decent dispensary building and ward attendant, better leave regulations and fixity of tenure.

But the practitioners desired to be governed by the original idea of independent subsidised medical practitioners, under which they should have liberty to practise anywhere in the afternoons and come back to the station in the night. They should have opportunities to discuss topics concerning village reconstruction with official and non-official agencies, with freedom to take part in civic and political affairs.

Mr. Vittaldas Pai next requested Major-General Sir Frank Connor to open the conference.

Sir Frank Connor's Speech.

In declaring the conference open, Major-General Sir Frank Connor said that he had been told that only about 25 rural medical practitioners were present at the conference. He knew how difficult it was for many and most of them to go to Madras from the mofussil. The Surgeon-General proceeding said that ever since he had come in their midst he had a very soft corner in his heart for the rural medical practitioners and for rural medical practice. That was not only because he had a soft corner for them but because of the necessities of countless numbers of people in rural areas who to a great part were untouched by medical aid. It was a very difficult thing for the Government or the Surgeon-General to grapple with such problems. They had in this province a population much greater than that of the United Kingdom. A great many of them were very poor and it was not possible for the Government to give free medical aid to all the poor people in this vast province. That problem had been exercising his mind very much. Whenever he had gone to districts and attended District Medical Associations, he had always wanted to know how rural medical practice was getting on. He had not come there to listen to their grievances. There would, he was sure, be a certain number of resolutions passed presently which would have his best attention. But the chief function of that meeting was for them to meet each other, talk over their difficulties, see in what reasonable ways they could be ameliorated,—in other words to take stock of their conditions and make wise plans for the future. The Surgeon-General would help them; the Government would help them. But the problem was a very difficult one. He had dropped in at many rural medical practitioners' homes. He had first-hand information of them and their conditions. For the most part whenever he had asked them how they were getting on, they had told him: "Not too badly; we do not make much money; we are pulling along, Sir." That was the expression but that was something. They must remember that if they chose rural medical practice, it meant a certain spirit of service which they could not get away from. Anywhere in the world, the doctor, fortunately or unfortunately, had a great deal to do for nothing. That might seem hard. But on the other side they did learn much from their patients. Further it was

invaluable in that it inculcated in them from the beginning that spirit of service without which the doctor was very poor indeed. Until the individuals in rural areas became more prosperous the doctors would not be in a position to get much in the way of fees. That was the stern fact. But every indication was present that the time had come when the condition of rural areas and people living in rural areas was going to be looked into more fully and help given them.

AN EXPERIMENTAL MEASURE.

"I think," said the Surgeon-General, "rural medical practitioners are very intimately connected with these Economic Councils which have been started in the districts. In this province we have 400 and odd rural medical practitioners of whom a majority have the L. M. P. qualification, a few are graduates and a few licentiates of the Indian Medical School. This whole service of rural medical practitioners is an experimental measure and this is the only province Indian where up to now it has proved a comparative success. I cannot say it is a complete success, as many of you say you are just pulling along. In Bombay they just tried in formally. In Burma they started it three years ago and they said it was hopeless and were going to give it up. This is the only province in India where on a fairly large scale—not the scale we want—this service is being given more than an experimental trial. It rests with you more than on any one else to make this experiment a success or not. If you say you have too many grievances, the Government will have to say that the scheme is a failure."

Proceeding, the Surgeon-General said that they had had till now five conferences. Some of them brought them some good fruits. Many had just passed resolutions on grievances. All of them had grievances. He had plenty of them himself. Grievances would not help them, unless they were reasonable. There was a fallacy in their argument that they wanted little control over them. Perhaps they felt that they had more control than they liked to have for the comparatively low subsidy they obtained. Under existing circumstances it was very difficult in most rural areas to make good enough living without help. Possibly they felt that the triple control, namely of the District Board, the District Medical Officer and of the Government made their position difficult, particularly in political times. Politics was likely to come into many matters and if their controlling powers were more than one, their position and prospects were likely to be affected. But the Government were not likely to give them subsidy without control over them; so also the District Boards. He would repeat again that it would not do for them to keep upon their grievances too much. Let them take advantage of this meeting, get to know each other better, and try and work out in what way they could improve themselves and above all

try and be of help to Government by trying to define what is the best way medical relief to the far distant rural areas can be given.

SPIRIT OF SERVICE.

Concluding, the Surgeon-General said: "We doctors have been taught to give relief to the poor for nothing. The spirit of service must never leave us. But we are not all missionaries. I think the predominant note must always be that of a certain amount of sacrifice on your part towards the problems of India, and I say that until individuals, young individuals, give a great deal of their time and leisure and service for the country, it will get on very slowly. Thousands and thousands of young men in other countries are working like coolies in labour camps, to turn marshy lands into cultivable ones. That is the sort of thing that makes a country go ahead. When that happens in India, India will go ahead and you have a share in that picture."

Presidential Address.

Dr. Rama Kamath, in the course of his presidential address, enumerated the various grievances of the Subsidised Rural Medical Practitioners and said that it was of paramount necessity that their organisation should be made free from all official and non-official embarrassments and be made an integral part of any scheme of village reconstruction to be started for the welfare of the village folk. No thought seemed to have been bestowed by the local boards in the choice of villages for supplying subsidised medical relief. In many instances, the selection of a village for medical relief was made without considering its population, its situation and other circumstances which, if carefully considered, would not only have served to achieve the object of the scheme, but would have brought some income by way of practice to the practitioner, so as to encourage him to settle in a village permanently. If anybody had grievances against the local bodies, it was the Subsidised Rural Practitioner. In spite of their sufferings, they should not fight shy of the local bodies. On the other hand, they should even at the risk of their own interests train people in the art of self-government, which, if it was not a reality in the villages, could not make India a free nation.

Almost all the missionary medical institutions in India were started in small huts. The men and women medical missionaries got only a living wage, but their devoted service to the village-folk could be seen now in grand well-equipped hospitals, some of which had since become institutions which impart instruction. If such work was possible for those who came to India from far-off lands, why could not Indians themselves do so and be as selfless as the missionaries? Many of the rural practitioners had been experiencing a lot of hardships one way or the other from those who wished to lord over them and from those whom they had been serving to rid

them of the diseases from which they suffered. They had been in an atmosphere of humiliation and intimidation with little or no appreciation of the services rendered by them. But they belonged to a noble profession and could afford to be tolerant. They should love humanity and their profession and the spirit of this love would take care of them all.

RURAL MEDICAL RELIEF.

The Rural Medical Relief Scheme being the integral part of any schemes launched now and to be launched in the future for the village uplift could not be ignored. The Viceroy was keen on building the health of the Indian nation and had impressed the Heads of the Departments working under him and those working in the provinces with the importance of starting the welfare work in the villages simultaneously with the work in urban areas. The organisation of Rural Medical Relief Scheme was the legitimate responsibility of the medical profession and not of one person in the medical department. There was no medical profession worth its name in India as in other civilised countries and all public health activities, preventive or curative, were run by individual officers of the Government. This state of things could not last long and for ever. The activities of the independent medical profession should begin in the villages.

No Government throughout the world could afford to give free medical aid to all the necessitous poor with the help of only the paid staff. There was another difficulty in this country and that was the existence of indigenous systems of medicine. Signs were not wanting for the people who had faith in these systems to press the Government to give medical relief in the particular systems in which they had faith. The Ayurvedic, Unani and Siddha systems had been able to get themselves recognised by the Government not only in this province, but in a few others. They as members belonging to a scientific profession could show the way to the Government, not forgetting their responsibility as citizens, by putting before the Government a constructive scheme of medical relief for the rural population. Everybody knew that they could not depend upon any fruitful source in the shape of money. But there were ways and methods by which a powerful organisation united in strong bonds of comradeship could put forth its unlimited resources in the shape of knowledge. If such an organisation was assured and if a spirit of real union prevailed in that organisation, the Viceroy down to the peasant would open their eyes and ask the co-operation and help of such an organisation in the uplift of the village.

It was essential that the Rural Medical Relief Scheme was run in such a way as to encourage the growth of family physicians. This could be done only by making private practice more attractive. The existence of State-paid medical service with unlimited privileges of

private practice which had been hampering the growth of independent medical profession in urban areas had similarly handicapped the rural practitioners who wished to settle in villages independent of the subsidy. Though the principle of the Government paying a subsidy in the way it was done now against the growth of family physicians, it would not be possible to induce qualified medical men to settle in villages so long as the State-paid doctors existed, unless the rural practitioners were shown some encouragement. The duty of opening and maintaining hospitals should fall on the Government and the unit of medical service should be hospitals and not dispensaries as was the case in the Federated Malay States. The treatment of out-patients should be left entirely to private practitioners in the urban areas. The Government should close down the out-patient departments wherever they existed and money saved should be utilised for the rural medical relief.

SCHEME WORTHY OF THE IDEALS.

Dr. Kamath in conclusion advised the Conference, if it had time, to draft a scheme worthy of the ideals of the profession and said:

"You should disabuse the minds of the public and the Government that the rural medical practitioner is one with little knowledge. It is essential that you should be far above the average of a general practitioner as you have to depend upon your resources in village where you cannot afford to have the help of senior consultants. Every one of you should be an up-to-date physician, surgeon and obstetrician and should be able to treat common diseases of eyes, ear, nose and throat. Provision should be made in your scheme for post-graduate training either in well-equipped District Hospitals or City Hospitals. Maternity and Child Welfare work should be part of your activities and you should have a working knowledge of nutrition with regard to the food available in your villages. Leprosy, Tuberculosis and even venereal diseases were considered once as social diseases prevalent only in urban areas. But the present knowledge shows that these diseases seem to be prevalent in villages to the same extent as in towns and cities. It is therefore necessary that you should be well up in the treatment of these diseases also. Apart from the routine sanitary duties you should interest yourself with school hygiene. In addition you should teach elementary hygiene and physiology to school children enough to make them understand domestic and personal hygiene; you should be in the village councils and other councils where the interest of those under your care are at stake.

FACING COMPETITION.

"The popularity of any system of medicine depends upon the person who practises the particular system. You who belong to the scientific system of medicine cannot have any difficulty to absorb in your system medicines and drugs from whatever system which

are rationally indicated for the treatment of your patients. So you should not feel nervous of competition with the other systems of medicine but always keep an open mind and try to understand other systems and make use of them if found rational. It will not be a surprise if the Government is forced to recognise all the systems in which the people have faith and the Government will be bound to carry out popular demands so long the people contribute to Government taxes from which the doctors are paid. The Government will have a very difficult task as no Government however rich can afford even to dream of the Utopian task of rendering free medical aid to all whom they govern. The best and the only policy the Government will have to adopt under those circumstances is to leave the medical relief of the general public to the private medical profession of whatever system as is done in other countries. So you must be prepared for any future exigency and it therefore behoves you to establish your usefulness and popularity always remembering 'I am my brother's keeper.' "

THE TINNEVELLY DISTRICT MEDICAL ASSOCIATION, PALAMCOTTAH.

(Affiliated to the Indian Medical Association).

The Tinnevely District Medical Association held its monthly meeting on Saturday the 26th of June 1937, at Papanasam, one of the most sacred places of the District, noted for wild scenery and most charming water-falls. Members numbering 42 including 3 lady doctors gathered from all parts of the District. All the members had an early bath at the falls which was followed by light refreshments. The Meeting began at 9.30 a. m. under the Presidentship of Dr. K. Srinivasaraghava Iyengar, L.M. & S., Retired Civil Surgeon. The Secretary read the minutes of the last monthly meeting held at the Headquarters (Palamcottah) on the 29th of May 1937, which were passed. Dr. T. V. Gopala Menon, M.B.B.S. of Ambasamudram, read out an interesting short address on Penetrating wounds of Abdomen. He also demonstrated a case of dextro-cordia to all the members. Dr. P. S. Srinivasan, L.M.P., of the Government Headquarters Hospital, Palamcottah, read out clinical notes of the following interesting cases which were successfully operated and treated at the Government Headquarters Hospital, Palamcottah, and at the Government Women and Children Hospital, Vannarpet, by Lieut-Col., T.S. Shastri, I.M.S.: 1. A case of Appendicitis. 2. A case of Acute inversion of uterus with submucous fibroid.

The following specimens in connection with the above cases were also shown to the gathering:—1. Appendix. 2. Submucous fibroid uterus.

After detailed discussion by the members Dr. K. Srinivasaraghava Iyengar, L.M. & S., summed up the salient and important features of all the cases. He also narrated briefly his reminiscences about

various important cases during his long experience. He offered his cordial thanks to all those members who helped towards the success of the function and thanked Dr. T. V. Gopala Menon, M.B.B.S. for the excellent arrangements. The members were warned about the prevalence of diphtheria in Tinnevely as a case was admitted to the Headquarters Hospital two or three days ago and they were requested to be on the look out for such cases. During the interval there was an excellent music. Thereafter, an excellent dinner brought the happy gathering to a close at 2 p.m.

HEALTH EXHIBITION.

Under the auspices of the Tinnevely District Medical Association in connection with its monthly meeting at Papanasam, a Health Exhibition was arranged at the Catholic School, Uchangulam, at 5.30 p.m. the same day. This was the first time a Health Exhibition was arranged at this place for the benefit of the Labourers and Staff and their families of the Mill. The Exhibition was kept open till late in the evening and also for the following day for the benefit of labourers, Staff and their Families and also for the School children. The exhibits consisted of posters relating to Cholera, Tuberculosis, Malaria, Small-pox, Fly-danger, Venereal Diseases etc.

SALEM MEDICAL ASSOCIATION.—On 27th June an ordinary meeting of the District Medical Association was held in the compound of the bungalow of the District Medical Officer, Lt. Col., A. C. Alagappan, when Surgeon-General Sir F. Connor was also present.

Dr. Alagappan spoke welcoming the Surgeon-General whom he requested to grant a site in the premises of the Headquarters Hospital for constructing a building for the association. It was also stated that now-a-days the danger was growing of quacks and unqualified men resorting to injections with the syringe which was harmful to the patients concerned. The Surgeon-General was requested to take effective steps to have such things stopped in public interest.

Dr. S. Krishnamurti Rao, M.B., B.S., read a paper on "Minor Conditions of the Rectum." The members took part in the discussion which followed on the subject. The Surgeon-General then spoke giving out his experience on the subject. He said that the association served a very useful object and brought the medical men together to exchange each other's experience and thought on the daily growing science of medicine and surgery. It would help them to create *esprit de corps* among their ranks and would raise the members of the profession in the estimation of the public. He therefore advised the medical men to stand by the association and to see to it that it progressed well.

The members and the visitors were then treated to tea-party by Dr. Raman Kutty Nayar and Dr. Kandaswami Pillai.

REORGANISATION OF THE I. M. S.

A PROTEST.

A resolution condemning the recent announcement of the re-organisation of the Indian Medical Service by the Government was passed at a meeting of the Calcutta branch of the British Medical Association on 10th June. The resolution reads as follows:—

"The Calcutta Branch of the British Medical Association condemns the Government of India's scheme for reorganisation of the Indian Medical Service under the new Constitution and is surprised to find that instead of abolishing the civil side of the I.M.S. as recommended by the Service Sub-committee of the Round Table Conference, the Government have thought fit to perpetuate the civil side and thus hamper the legitimate growth of the medical profession in India, envisaged by full Provincial Autonomy in other spheres. In view of the fact that members of the military service are never transferred to the civil side except in emergencies in any other civilised country, this branch of the British Medical Association respectfully requests the Government of India to withdraw the resolution."

CALICUT MEDICAL ASSOCIATION. A meeting of the Malabar District Medical Association was held on 13th June with Dr. N. Achuthan, Vice-President in charge in the chair, when Rao Sahib Dr. R. Anandan Pillai, District Health Officer, delivered a lecture on "Some Reflection on Public Health." Dr. Mrs. Barretto, was 'at home' to the members. The President eulogised the services of Dr. V. Krishna Menon, the retiring Secretary, and welcomed the new Secretary, Dr. C. V. Narayana Aiyar.

SALEM MEDICAL ASSOCIATION. A meeting of the District Medical Association was held on 13th June at Yercaud, under the presidency of Major A. C. Alagappan, I.M.S., District Medical Officer, Salem, and President of the Salem District Medical Association. Capt. Hussey of Yercaud, read a paper on "Venereal Diseases." A discussion followed. The members were treated to tea by Dr. T. M. Natarajan. The meeting then terminated.

KUMBAKONAM MEDICAL ASSOCIATION. The monthly meeting of the Kumbakonam Medical Association was held on 13th June at Dr. Sambasivan's Nursing Home, Mrs. Selvanayagham, Lady Assistant Surgeon, Government Hospital, Kumbakonam, presiding. A lecture was delivered by Dr. V. Rajagopalan on "Puerperal Sepsis" or fever during confinement. The importance of ante-natal care and supervision was stressed.

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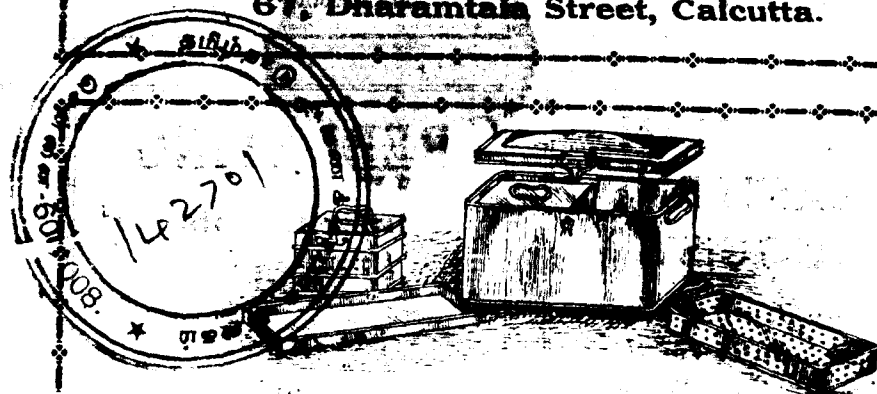
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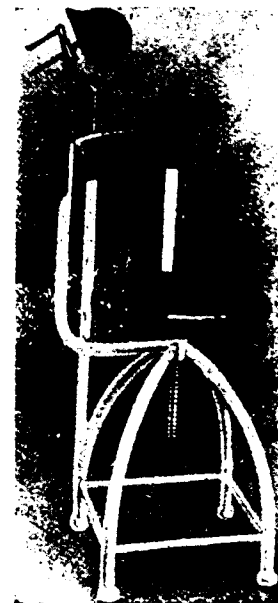
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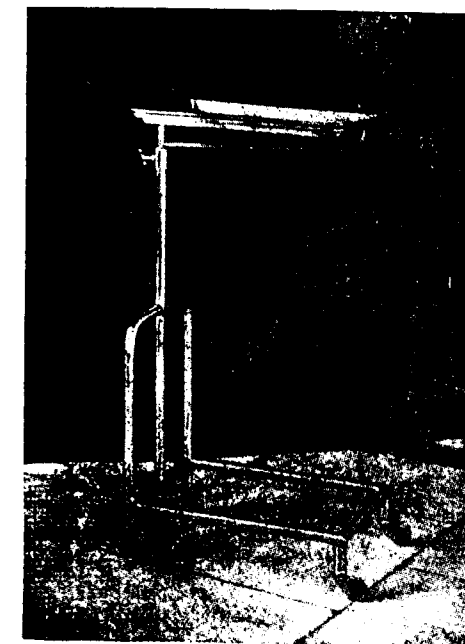
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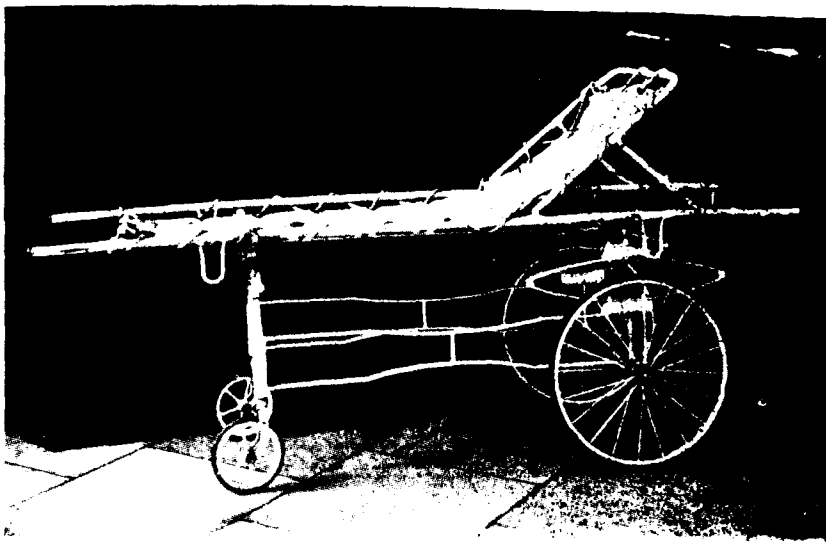
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