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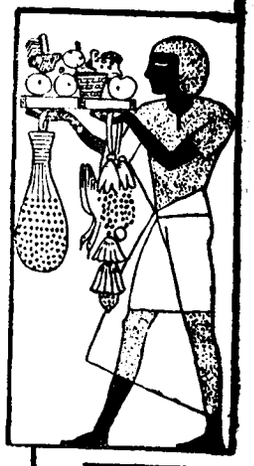

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MEDICO-SURGICAL SUGGESTIONS

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Original Articles.

HAEMOPTYSIS IN PULMONARY TUBERCULOSIS*

BY DR. NANILAL GHOSH, M.B., D.T.M.

To the layman the most reliable symptom of pulmonary tuberculosis is blood spitting and many physicians share this view, although we know that a large proportion or cases of phthisis persue their course and terminate in recovery or fatally without any hæmoptysis, while in many cases hæmoptysis is not due to tuberculosis. In the Howrah General Hospital, for example, we generally find this symptom in about 55 per cent of phthisis patients.

PATHOLOGY

We should have a clear idea of the anatomical changes responsible for bleeding in order to make diagnosis and prognosis of a case of Hæmoptysis. There are several varieties of pulmonary lesions which may bring out blood from the lung tissue (1) Local Inflammation (2) Ulceration and erosion of the blood vessel and (3) aneurismal dilatation of blood vessel.

1. The initial haemoptysis are caused by localised active hyperæmia or in other words they are of the same origin as the rusty sputum of pneumonia and hæmorrhagic sputum of influenza pneumonia. This bleeding may be profuse, though in most cases only blood streaked but may be continuous for several days. They are caused by tuberculous toxin which increases the permeability of the walls of the capillaries.

2. When the pulmonary lesion proceeds from infiltration to caseation then to softening and finally to liquifaction it undoubtedly implicates the blood vessels that pass through it and produces in them changes similar to those in the lung tissue. It is therefore strange at first sight that considering the ulcerative processes and the destruction of tissues, hæmorrhages do not occur more often. But this is explained by the strong tendency to formation of thrombi

* A lecture delivered before the Howrah Medical Club

in the blood vessels except in very acute cases. In the great majority of cases proliferative processes occlude the arteries before they are exposed to the destructive action of the tubercle bacilli. Slow rate of occlusion and progressive caseation may however lead to the weakening of the wall of the artery at a time when it has still to carry the load of blood pressure. Adventitia, media and finally internal elastic membrane are destroyed by caseation. necrosis and only the slightly thickened intimia is remaining behind. The necrotic portion of the wall is washed away by the pus of the cavity and under the pressure in the lumen, the thin remaining membrane is stretched and transformed into an aneurismal sac (aneurism of Rasmussen). A slight cough is often sufficient to break this thin membrane and a stream of blood spurts into the cavity. The rupture of these aneurismous vessels strikes down a patient who is on the road to recovery when a sudden hæmorrhage takes place like a storm out of a clear sky. When the cavity into which the aneurism or the lacerated artery opens is small the extravasated blood usually coagulates and the clot obstructs the opening of the blood vessel, thus stopping the bleeding. But in large cavities or when the blood is deficient in coagubility the hæmorrhages are sometimes so extensive as to cause death from suffocation by blocking the large bronchi and the trachea; in cachectic patients the loss of blood may end life abruptly. In many cases the pulmonary hæmorrhage is the standing point for a galloping progress of the disease, it is from the blood-filled cavities that the tubercle bacilli seem to find ideal conditions for their rapid multiplications and moreover in addition the patient's resistance is weakened by the loss of blood. In the more acute cases of phthisis in which the lung tissue is going away at a rapid space, the hæmorrhages usually come from ulcerating erosions of the pulmonary vessels and may prove fatal immediately. Here there is no time for narrowing of blood vessels, thus preparing it that in case of rupture it may be easily repaired by occlusion with a thrombus which saves the majority of chronic consumptives from death from this cause. It is really wonder to think that considering the great frequency of tuberculous cavities, fatal haemorrhages are rare. In only about 2 per cent of the cases with ulcerative tuberculosis are haemorrhages the immediate cause of death.

In acute pneumonic phthisis which very often begins with sharp and profuse hæmorrhage usually signs of cavitation are detected from X-ray examination (example of Mr. Banerjee 20 years old. No signs and symptoms beforehand, sudden hæmoptysis, high fever. Pneumonic process in both lungs started after hæmorrhage. Dr. Rakhal Dutt did X-Ray by protable machine, signs of cavities found, no sign before, died in 21 days). This corroborates the fact that profuse hæmorrhage in phthisis is not caused by mere active inflammation but by actual erosion of a blood vessel.

In fibroid phthisis the sources of hæmorrhage are lacerated dilated or varicose vessels which pass through the bronchiectatic cavities characteristic of this form of disease and also oozing from capillaries or arteries which travers the granulation tissue on the walls of the cavities. The bleeding is therefore not profuse but recurring in many cases.

HAEMOPTYSIS AT THE OUTSET OF PHTHISIS

The first symptom to draw the attention of the patient to his disease is hæmoptysis which occurs in three different types :—

In the first type: Patient had felt perfectly all right until the initial haemoptysis without any pneumonitary symptom. While at work, or engaged in an exciting conversation or even waking up from sleep during night, the patient feels a sensation of warmth in the throat, coughs and expectorates a mouthful of blood or during a fit of coughing he brings up some blood streaked sputum. A careful clinical examination of the chest and X-ray examination may fail to show any disease of the lungs. The temperature normal, appetite good, only for a few hours or a day the patient continues to bring up, dark clots and when this ceases he feels perfectly all right. There are many people who during their puberty had a pulmonary haemorrhage and subsequently pass through life without experiencing anything that may lead to suspicion of tuberculosis. There are numerous others who give history of such a haemorrhage many years before the onset of active phthisis. It is very rare to find fatal result with initial haemorrhage. In our country due to rapid tuberculisation of the people of the virgin tract this type is very rare. In our chest department out of 200 cases with symptoms of initial haemoptysis only 54 were early cases and 146 were advanced type of pulmonary tuberculosis.

In the second type :—The initial haemorrhage continues for several days and when it ceases the patient shows symptoms of phthisis —cough, expectoration, tachycardia, night sweats etc. Physical examination of the chest shows distinct signs of lesion in one or both apices and tubercle bacilli may be found in the sputum. The subsequent course of the disease is that of chronic phthisis, though a large proportion of them are arrested within a few months and there are others who get several attacks at long intervals. In some indefinite or conclusive signs of an apical or subapical lesion may be found on physical or X-ray examination and even tubercle bacilli may be found in the sputum yet they remain well indefinitely.

In the third type :—The initial haemoptysis is seen in patients who maintain that they felt quite well but on close questioning reveals the fact that they have been coughing for months bringing up muco-purulent-sputum, that the appetite has failed and that they

have lost strength and weight. In young women we may find that they have missed one or more periods. They however have considered these symptoms trifling and continued their work as usual. The haemorrhage in these cases is apt to be profuse and to last for several days because while insidious in its onset the tuberculous process in the lungs has already progressed very far and indeed cavitation are often found in such haemorrhage. In the majority of the cases physical examination of the chest shows lesions of moderate extent. Tubercle bacilli are found in the sputum in most cases.

HAEMOPTYSIS DURING THE ADVANCED STAGE

In confirmed chronic cases of phthisis we meet with haemoptysis at any period of the disease. The bleeding may be of various degrees from that of sputum tinged with blood to the expectoration of several mouthfuls of pure bright red blood—to copious hæmorrhage during which several pints are brought up within 24 hours and in rare case it has been reported that as much as 6 pints (5 quarts) of blood were brought up. The blood is bright red and usually mixed with sputum; when very profuse the blood may be blue or venous. It is evident that in most cases the blood does not coagulate quickly some clots are seen but the bulk remains fluid. Even the addition of calcium salts, serum and tissue extracts does not enhance its coagulability. The reasons for these delayed coagulations are not clear.

HAEMORRHAGIC PHTHISIS

This is a form of phthisis which is characterised by frequent and recurrent haemorrhages. The bleeding occurs at irregular intervals for years without harming the patient very much. In these patients we may not find any definite physical signs in the chest, no fever, no emaciation only occasionally slight cough; haemoptysis at times and bacilli in the sputum reveal the condition. At times the bleeding is extremely copious and it looks as if it were the last but they recuperate very soon. As a rule these patients though tuberculous are obese and of plethoric type. In some of these patients we find signs of more or less extensive pulmonary lesion which remain stationary or quiescent inspite of recurring haemorrhages. I had a case under my care who has recently died at the age of 82. From the age of 25 he was getting profuse haemorrhages and from that time had been under the treatment of Rai Bahadur G. C. Chatterji. He had been suffering from the recurrent haemoptysis; sometimes profuse for the last 57 years and only recently he died from terminal pneumonia. All along from the beginning of haemoptysis his sputum showed tubercle bacilli.

PREDISPOSING CAUSE OF HAEMOPTYSIS.

We have seen that while haemoptysis is common among consumptives still many pass through the disease without this accident.

Women show a lesser proportion of bleeders than men. While haemoptysis has been seen at all ages even in infants still most of the cases occur between 15—50 years of age, probably phthisis is most active at this period.

EXCITING CAUSES

Patients with nervous and excitable temperament are worst sufferers. During some excited conversation, over exertion, singing running, mountain climbing, straining at stool or as a result of traumatism, haemorrhages may be provoked but over-exertion should not be overestimated as a factor in the causation of haemoptysis. Streaked sputum or mild haemorrhages may be caused by overwork or excitement but copious haemorrhage are always due to rupture of an aneurism of Rasmussen or the erosion of a large branch of pulmonary artery due to tubercle. Perhaps the fact that the majority of copious and fatal haemorrhages occur during the night shows clearly that over exertion is not the main factor. We are in the dark why these haemorrhage are more apt to occur during the night. Consumptives who had been urged more to eat excessively becoming plethoric and fat bleed more often than those who eat well but moderately.

Exposure to sun's rays is apt to provoke haemoptysis: the indiscriminate use of artificial heliotherapy is apt to cause bleeding. Coitus may excite haemorrhage and even death has been reported soon after the intercourse. Certain drugs used extensively in the treatment of phthisis such as creosote and its derivatives, iodides, aspirin etc. are often instrumental in causing haemoptysis.

Bleeding is often associated with weather changes and according to Bogen, barometric pressure is the chief factor, although the accompanying changes in temperature, humidity and electric reaction which are also noted at these times may be responsible. How these influences are exerted is not clear, but we know that great demands are made on the adaptive mechanism of the body with weather and climatic changes and one of the most active mechanisms in adaptation is the cardiovascular system. It is known that inflamed cells are negatively charged electrically and easily respond to stimulation and one of the effects of increased stimulation upon the vessels is to increase the permeability of their walls. This favours leakage.

DIAGNOSIS

It is generally stated that all patients with haemoptysis should be considered tuberculous and treated accordingly until the bleeding is proved to be due to some other cause. But because large number of haemoptysis are due to pulmonary tuberculosis, all cases of haemoptysis are not due to the same cause. Cabbot found out of 3444

cases of haemoptysis only 50 per cent due to pulmonary tuberculosis; Blake 54 per cent out of 900 cases. Fishburge among his private patients only 50 per cent. In our Chest Department out of 239 cases of Haemoptysis 131 cases i.e. 55 per cent were due to pulmonary tuberculosis.

In cases of initial haemoptysis it is difficult to ascertain whether the blood is derived from Tuberculous lesion or due to some other cause. It should always be remembered that haemoptysis may be a symptom of every disease of the upper and lower respiratory tracts tuberculosis as well as others. Careful examination of the nose and throat may show that it is due to congestion or varicosity of the upper respiratory tracts such as acute rhinitis, pharyngitis, tonsillitis etc. In case no signs and symptoms of a pulmonary disease are discovered and the bleeding cannot be definitely diagnosed as non-tuberculous condition, the heart normal and there is no history of injury, the patient is to be kept under prolonged observation before deciding that he is not tuberculous. It is however a fact that only streaked sputum very rarely originate in pulmonary parenchyma and streaked haemoptysis is far more frequent in Bronchitis than in Phthisis.

The most perplexing cases that present themselves to the physician complaining that several days ago they expectorated blood. In many blood was derived from nose, throat, gums etc. Examination of these parts may not show any irritation, inflammation or varices, while in the chest are found some indefinite signs of an apical lesion which may be non-tuberculous or some changes in resonance and breath sounds indicating a perfectly healed lesion thus leading to erroneous diagnosis of active tuberculosis. A slight opacity of the apical region seen on the X-ray film may strengthen the conviction of active tuberculosis being responsible for bleeding.

Copious Haemorrhage

It is very often difficult to decide whether the bleeding is due to tuberculous lesion, a bronchiectatic cavity, cancer or syphilis of lungs or in rare cases it is not altogether haematemesis. In bronchiectasis the patients are generally over 45 years old, pulse and temperature normal and the general condition of the patients good. Sometimes sallow and cyanotic colour may appear and dyspnoea on exertion develops. X-ray examination after an injection with *lipiodol* is most important in definitely localising the extent and type of involvement. Persistent chronic bronchitis accompanied with haemoptysis should be investigated for bronchiectasis by lipiodol test. When physical examination shows that the lesion is localised in a lower lobe while the apices are free from pathological changes, the disease is almost invariably non-tuberculous :—bronchiectasis, pulmonary abscess, or gangrene. In older patients with

arteriosclerosis arterial hypertension is to be thought of. Usually a careful history clears up the diagnosis while in borderline cases we should reserve our opinion until haemorrhage ceases and a careful examination of the patient is feasable. Usually in such instances fibroid phthisis should be carefully searched.

In addition to tuberculosis the following conditions are liable to cause pulmonary haemorrhage (1) Cardiac disease specially mitral stenosis (2) Aneurism of aorta (3) Haemophilia (4) Chronic Bronchitis (5) Syphilis (6) Abscess (7) Gangrene (8) Primary cancer of lung (9) Certain acute specific fevers, pneumonia, epidemic influenza (10) Suppurative process in mediastinum (11) Foreign body in bronchi (12) Injuries to chest (13) Paroxysm of pertussis.

Hydatid Disease of the Lungs Actinomycosis & Pneumoconiasis

In our country bursting of lung abscess through lungs which is not very rare is to be thought of. The expectoration is copious thick reddish and purulent with little or no odour.

Localisation of the Source of Haemorrhage

Henceforth the determination of the side of the chest in which the bleeding takes place was merely of academic interest: because it made very little differences on which side the icebag, which has been traditionally used in the treatment of this symptom, was applied. But recently since we have found that A. P. treatment may stop a copious haemorrhage after every treatment has failed it is of practical importance to localise the bleeding point. X-ray examination is most important in definitely localising the extent and type of involvement, Persistent chronic bronchitis accompanied with haemoptysis should be investigated for bronchiectasis by lipiodol test.

In cases who have been under observation for sometime and it is known that the lesion is unilateral, the problem may be simple, but in bilateral lesion it is very difficult and often impossible to determine positively which lung is bleeding. Percussion should not be done for fear of increasing the bleeding and auscultation may show a limited area of moist rales and perhaps amphoric breath sounds. But it is a noteworthy fact that during profuse haemorrhage the blood may be aspirated into the non-bleeding lung and produce all sorts of rales, even X-ray films fail to settle this problem definitely. It is therefore at times impossible to decide positively which lung is bleeding. In rare instances we hear murmur synchronous with the heart beat over the site of the cavity. Sometimes after a copious haemorrhage the more affected diagnosed side remains unaltered while in the other unaffected lung sign of new lesion appear. Sometimes the patient himself may be able to say from which side the blood is coming by feeling the sensation inside.

PROGNOSIS

Patients without exception overestimate the significance of haemoptysis and are more terrified at the appearance of a drop of blood in their sputum than any other graver symptoms of phthisis. If the patient is not dead by the time the doctor is called there is no immediate danger of death. The percentage of death is hardly 2 per cent. A fatal issue in initial haemoptysis is extremely rare. Haemoptysis is more often a salutary phenomena because it draws attention of the patient to the condition of his lungs which he may have otherwise neglected. Patients may have had cough for months and other symptoms all of which they considered trifling till haemoptysis made its appearance, opening their eyes. Profuse and fatal haemorrhage may occur in fibroid phthisis. In haemoptysis the immediate and specially ultimate prognosis depends less on bleeding, its abundance or even repeatation than on the character and extent of the lesion, the symptoms which accompany the clinical picture, the subsequent course of the original disease and the complications which may arise. When we find during haemorrhages that a patient had a good full pulse less than 100, no fever, no dyspnoea, the immediate prognosis is good, but if the pulse is soft, small, compressible and rapid we may be sure that the bleeding is continuing even if we do not see the blood brought out in large quantities, an internal haemorrhage may be feared, the blood being retained in large cavity while the feeble patient is unable to force it out by cough.

TREATMENT.

Most haemoptysis have a tendency to stop of their own accord regardless of anything that the physician may do, but there are certain things which are designed to put the patient in best condition possible, to aid nature in her methods. In all cases whether slight or severe the patient should go to bed until the bleeding has stopped. The patient is often frightened which quickens the heart's action and raises blood pressure. This nervous temperament of the patient should be calmed down by reassurance and the temperaments of the friends and relatives who may be present to help or harm the patient should be controlled. Physical and mental rest are of prime importance.

MILD CASES

Sputum is blood tinged, small clots are expectorated or small quantities of liquid blood are brought up.

(1) Patient should be given absolute rest in bed until no more blood is seen in the sputum.

(2) Morning and evening temperature and pulse rate should be recorded to determine whether there is any indication of active lesion. A determination of sedimentation rate also afford a valuable indication as to its activity.

(3) During the continuance of bleeding all food should be served cold, fluid should be restricted to about 1 seer in 24 hours and diet should consist of milk, bread and butter, barley water and glucose.

The bowels should be opened by saturated solution of Mag. sulph. one teaspoonful every hour until the bowels move. Milk of magnesia or compound rheuberb pill is of value. Straining should be avoided by soapwater enema. Urinals and bed pans should be used during active bleeding.

Calcium should be given by mouth in some form, preferably colloidal calcium one ounce three times a day. This calcium should be continued for at least 2–3 months. When the bleeding has ceased and if the temperature has been normal throughout, after a day or two, the patient may be allowed to get up and return to work a week later.

In all cases of haemoptysis due to pulmonary tuberculosis the patient should be warned that he should not expose his naked body to the sun and when out of doors he should work in the shade because we get more cases of haemoptysis in the summer months.

MODERATELY SEVERE HAEMOPTYSIS

Here the haemoptysis is usually an indication of active tuberculosis lesion. The temperature is raised and fails to return to normal in a day or two and tubercule bacilli are found in the sputum

(1) The patient should be placed in bed preferably in semi-recumbent position on two pillows. He must be on absolute rest and not allowed to do anything for himself. He should be kept in a quiet room and no visitors allowed.

(2) An injection of ¼ gr. morphine sulphate should be given subcutaneously. It will quieten nervousness, quieten the circulation and respiration, relieve restlessness by allaying the cough, will assist clotting. It is not necessary to give enough morphia to stop cough altogether and it is very rarely necessary to repeat the injection as there is risk of diminishing cough reflex. Continuous dry cough should be checked but productive cough, if there is anything to expectorate should be encouraged. Ice to suck is harmful. Ice bag on the chest may be applied for its psychological effect. A few drops of oil of terpentine might be allowed for inhalation from a handkerchief. If the bleeding persists a capsule of amyl nitrate might be broken and the vapour inhaled. It is supposed to reduce the systemic blood pressure and constrict the pulmonary vessels at the same time which would be specially favourable to reduce the pulmonary haemorrhage.

3. S. L. R. 2 years: Capillary Bronchitis. Both lungs full of moist sounds.

12/5/40:—temp. 100° Resp. 40, pulse 120. U.S T. ½ tab. every 4 hours. The temperature reached normal within the first 24 hours; the moist sounds have cleared within the next 48 hours.

4. P. 2½ years, pneumonia, right middle lobe.

Temp. 102°, Resp. 60, Pulse 140. U. S. T. 2/3 tab. every 4 hours. Temperature reached normal within the first 36 hours and within the next 3 days the child recovered completely.

The results of U. S. T. are gratifying in the respiratory infections of children. The effects are equivalent to that of M & B 693. The number of cases treated are not many to warrant any definite conclusions. I shall be satisfied if my article stimulates the interest of the members of the medical profession to try the new drug extensively in respiratory diseases of children and also in lobar pneumonia in adults and thus evaluate its real efficacy.

REFERENCE.

1. Treatment of Pneumonia with 2 (P-aminobenzene *Sulphanomide*) by G. M. EVANS and F. GARISFORD, *Lancet* July 1938. p. 14.
2. WHITBY-C. E. H. 1938. *Lancet* 1, 1210.
3. "Prontosil" Bayer's booklet.

TWENTY QUESTIONS ON GONORRHEA.

INTRODUCTION.

Gonorrhea—a disease with which two million persons in the United States are infected . . . . a disease which is painful and dangerous to the individual concerned , . . a disease which is highly communicable –presents a problem to all the people.

Syphilis –though a different disease and because of its end results a more deadly one—is a similar public health problem. Yet syphilis is retreating before a determined attack.

Education has played a major role in the campaign against syphilis. Today people know that closing one's eyes to a danger does not remove the danger. They know the quack has no answer. They know that only prompt and competent treatment can cure syphilis.

The question is: Can we apply the same tactics against gonorrhea? True, we are not able to state treatment procedures for gonorrhea as definitely as for syphilis. But progress is being made. And experi ence in the syphilis campaign indicates that emphasis on the facts through active public education will materially aid control efforts.

"20 Questions on Gonorrhea" presents such basic information. It was written in layman's language for his use and for the use of the physician who wants to know how to tell the story of gonorrhea in nontechnical terms. The booklet has been prepared by the United States Public Health Service in co-operation with the American Neisserian Medical Society, the professional organization of special lists in gonorrhea.

1. WHAT IS GONORRHEA?

Gonorrhea is a dangerous, contagious, often very painful disease. It is known by many other names, including "clap," "gleet," "strain," and "dose."

The mucous membrane or lining of the urinary and genital organs and passages becomes inflamed and a discharge of pus forms. Although it is a local inflammation similar to catarrh, gonorrhea is by no means a simple disease. The infection finds its way into folds and crannies of the tissues where drainage is slow and treatment difficult. Gonorrhea is far more serious than the "common cold."

Gonorrhea and syphilis are two different diseases. Gonorrhea does not turn into syphilis nor does syphilis turn into gonorrhea. Both diseases, however, may occur in the same person at the same time. Gonorrhea does not come from strain or heavy lifting.

2. WHAT IS THE CAUSE OF GONORRHEA?

The direct cause of gonorrhea is a germ called the gonococcus. Under the microscope the gonococci usually appear in pairs resembling the two halves of a coffee bean. This germ is found in the discharges from the human tissues it infects. The gonococcus is found only in human beings. It occurs nowhere else. So far it has been found impossible to transmit the disease to any of the lower animals. This means researchers do not have the advantage of conducting experiments on animals.

Outside of the body, the gonococcus is easily killed. It dies almost instantly upon becoming dry. The delicate nature of the germ makes accidental infection by indirect means extremely unlikely. In the hidden moist tissues of the body, however, it is very difficult to overcome. In the moist discharge, the gonococcus retains its infecting possibilities so long as it is moist.

3. WHO GETS GONORRHEA?

More people suffer from gonorrhea than from any other serious disease. It recognizes no boundaries—economic, racial, geographic, or social. Each year in the United States there are over one million new cases of gonorrhea—twice as many as new cases of syphilis; three times as many as tuberculosis; fourtimes as many as scarlet fever, and 130 times as many as smallpox.

In addition to the new or acute cases of gonorrhea, it is estimated that another half million cases of chronic gonorrhea each year receive medical attention for the first time.

Available statistics seem to indicate from two or four times as much gonorrheal infection among men as among women. Much of this apparent difference probably is the result of greater neglect in seeking treatment among women than among men.

4. HOW IS GONORRHEA CONTRACTED?

In adults gonorrhea is practically always contracted through sexual relations with one having the disease. There have been apparently authentic cases in which the disease was transmitted to the susceptible tissues from moist pus left on toilet seats, from the use of borrowed douche nozzles, and the like. These cases seem to be medical curiosities, however. As a measurable source of gonorrhea, accidental infection can be disregarded.

Girl babies who develop the disease are infected usually by sleeping in the same bed with infected persons or through the carelessness of mothers or nurses who either have the disease or are carrying from others who have it.

Gonococcal infection of the eyes in infants (ophthalmia neonatorum) is contracted during passage of the infant through the birth canal of a mother having gonorrhea. The infection can be

prevented by a drop of silver nitrate placed in the eyes of the baby immediately after birth. Most States require such treatment bylaw. Several decades ago this condition accounted for about 28 per cent of the blindness of children. Today, gonorrheal blindness in infants is a rarity. This is an outstanding example of preventive medicine by public health control.

5. HOW DOES GONORRHEA AFFECT MEN?

In men and boys of all ages accidental infection is very rare, if, indeed, it ever takes place. The infection starts in the front part of the urethra, the canal leading from the bladder to the outside. Early, competent treatment at this time will often cure the infection before it spreads into more remote regions of the body.

If treatment is neglected or poorly given, or if the individual fails to carry out the instructions of his physician, the infection passes further back into the urethra. Here it spreads to the prostate gland, the gland that surrounds the top of the urethra in men, and to the base of the bladder.

Gonorrhea in men largely affects the urinary system. However, in poorly behaved patients, the infection may pass into the genital system, passing into the structures near the testicles, where it causes great swelling and pain. Frequently the infection blocks the tubes through which the sperm cells pass. If both tubes are involved, the patient nearly always becomes permanently sterile.

6. HOW DOES GONORRHEA AFFECT WOMEN?

In women the story is quite different. The genital rather than the urinary structures bear the brunt of the infection. The urethra will probably become infected but in most cases it is readily cured.

The vagina, or the canal connecting the uterus (womb) with the outside, escapes infection since it is lined with a type of tissue that resists the gonococcus. The cervix, the neck of the uterus, however, is quite vulnerable and frequently the infection finds its way into the fallopian tubes, which carry the ova from the ovaries to the uterus. When this occurs on both sides, the patient is usually permanently unable to bear children.

Both in men and in women the surfaces of the internal sex organs have many tiny channels from which small glands empty their secretions. The gonorrheal infection often extends into these channels and, because of their poor drainage possibilities, they are very difficult to treat. Abscesses frequently form.

7. HOW LONG DOES IT TAKE TO DEVELOP?

The usual period elapsing between the acquisition of the infection and the development of symptoms (the incubation period) is from 3 to 5 days. Sometimes the disease starts in such a mild

form that the individual is not aware of its presence. Indulgence in either sexual intercourse or alcohol at this time will tend to intensify the disease so that pronounced symptoms develop. In other words, the disease already present in a mild form is artificially stirred into activity. Occasionally, the incubation period may extend for as long as 2 weeks.

8. WHAT ARE THE SYMPTOMS IN MEN?

The first symptom in men is a feeling of itching and irritation in the urethra. Usually there is a burning sensation during the passing of urine. A few hours later a discharge of pus will begin. Alcohol and sexual excitemeht tend to exaggerate the symptoms. Usually the discomfort is slight, although considerable pain may be present. There may be swelling at the outer end of the urethra.

9. WHAT ARE THE SYMPTOMS IN WOMEN?

In women the symptoms are not so easily recognizable Usually however, there is some discomfort and burning in the urethra. There is a feeling of heat and soreness at the outlet of the vagina and a discharge of pus. This pus may be quite irritating and cause discomfort and redness of the surrounding skin surfaces. In other cases the flow of pus may be so small as to pass unnoticed.

Any discharge from the vagina is cause for suspicion. The rather common condition of leukorrhea or "the whites" may really be gonorrhea.

In a short time this acute period of gonorrhea usually subsides. The disease in most instances will continue to infect the more hidden sex organs. It frequently passes into the fallopian tubes where it causes considerable pain in the lower abdominal region. Gonorrhea may also cause fever.

10. WHO SHOULD TREAT GONORRHEA?

At best gonorrhea is difficult to treat. Only a competent physician is able to give satisfactory treatment. The quack doctor, and the drug clerk who counter prescribes, only want your money. They are not interested in your health. Self-treatment in gonorrhea is unsatisfactory. The best assurance of quick and complete cure is to go under the care of a physician at the first symptom of gonorrhea.

11. HOW DOES THE PHYSICIAN DIAGNOSE GONORRHEA?

The most certain diagnosis of gonorrhea is to find the gonococcus in the discharge from the infected patient. The physician simply smears a microscope slide with the discharge. The slide is then stained so that the gonococcus will become visible, and then the doctor looks for it through a microscope.

Frequently, especially in chronic cases, no sign of the gonococcus can be found, so that the physician must depend upon other methods

for diagnosis, such as growing the germs in a test tube. Flakes and shreds of pus (and occasionally blood) will show in the urine.

12. WHAT ARE THE CHANCES FOR CURE?

Under proper care gonorrhea can be cured in nearly every instance. It is usually easier to do this in men than in women, but there is little real basis for the pessimism which many people still have regarding cure of gonorrhea.

13. HOW DO WE RECOVER FROM GONORRHEA?

We recover from smallpox, typhoid fever, pneumonia, and a host of other diseases, not because the physician has a sure cure that turns the trick, but because the body itself is able to build up certain substances that overcome the disease. The physician acts as a watchman or guide instead of an all-powerful giver of curative drugs.

To a great extent this is the story for gonorrhea. A competent physician can shorten the attack and prevent many of the complications, yet it is the patient himself who really produces the cure. His body manufactures the curative substances which gradually eradicate the infection.

In no disease, however, is it easier to retard or prevent the curative efforts of the body. The patient with gonorrhea must give up alcohol and sexual excitement. He simply fails to get well as long as he indulges in either of them. Rest and quiet is perhaps the best aid in treatment.

14. WHAT ARE THE FACTS ABOUT TREATMENT?

"Take it easy" is the most important treatment principle for both patient and physician to remember in treating gonorrhea. Rest and quiet permits the body to build up necessary resistance against the desease. In addition, it helps to prevent the infection from spreading to other sections of the body.

The following list of rules for the patient will enable treatment to progress swiftly and complications to be prevented.

Go to the doctor at once upon the first symptoms of gonorrhea. Follow his advice faithfully. Cure is usually possible with early treatment. Delay is dangerous.

Avoid sexual excitement. Do not have sexual intercourse while infected or while under treatment. It is dangerous for the patient. It makes the disease last longer and harder to cure. Gonorrhea is dangerous for the other party. It is an extremely infectious disease.

* Avoid alcohol in any form, including beer. Alcohol increases the discharge and makes the infection worse. Drink plenty of water.

* Rest as much as possible. Exercise as little as possible. Avoid constipation. Keep your bowels open.
* Do not wear a dressing over the urethra or vagina that prevents the free drainage of pus. It makes the infection worse and more prolonged.
* After handling the sex organs, wash your hands thoroughly with soap and water so that the germs will not be spread to other people, including children. You may also carry the disease to your eyes. Be extremely careful about soiled towels. Do not allow others to use your irrigation syringe or douche nozzle. You should not use that belonging to another person. Infection may spread.
* When the testicle is swollen, all treatment should be stopped. See your doctor at once.
* Douches, unless properly taken, may spread infection to the fallopian tubes. They should only be used when ordered by a doctor.

15. WHAT IS THE PRESENT ATTITUDE ON SULFANILAMIDE AND FEVER THERAPY FOR GONORRHEA ?

Within recent months several new methods of treatment for gonorrhea have produced promising results.

In many instances the drug sulfanilamide has given excellent results. In other cases it has been of little value. In its action sulfanilamide seems to help the body in its task of wiping out the gonococcus. It seems to prevent normal growth of the germ untill the body has time to build up the necessary resistance to effect a cure. Salfanilamide appears to have best results when the patient goes to bed for complete rest during the treatment. Unless properly given under the careful supervision of the physician, sulfanilamide may be very dangerous. It may cause considerable damage to the blood and blood-making organs, from which some patients have not recovered. Do not attempt self-treatment.

Fever treatment also has been useful especially in certain complications of gonorrhea such as infection of the fallopian tubes and in arthritis Fever treatment, which raises the body temperature to a high degree, must be used under the constant and strict care of a well-trained physician.

Unfortunately, quack doctors and medical racketeers have taken advantage of the publicity on fever treatment and sulfanilamide. Do not be fooled by promises of quacks. Play safe. The instructions of your physician should be followed carefully and completely.

16. WHEN IS THE PATIENT WELL ?

A patient is cured of the disease when the last gonococcus has disappeared from his tissues. This stage is preceded usually by a more or less prolonged period of apparent cure. All the symptoms of the disease disappear before cure has really taken place.

So long as a single gonococcus is present the disease can be transmitted to another individual. Hence, the necessity for thorough and careful medical study before cure can be assumed and others exposed to possible infection.

Here, too, is another reason to avoid over-the-counter and self-treatment for gonorrhea In either case the patient is left as sole judge of progress and cure. He is too prone to consider himself cured when, from a social point of view, he is a menace to public health.

17. WHAT ABOUT COMPLICATIONS ?

Involvement of the seminal vesicles, the epididymis, the joints, heart, or any kind of abscess formation is called a complication.

Fortunately, most of these complications are easily prevented if the patient gets to a physician early and strictly adheres to the instructions given him. This permits the disease to be brought under control and cure is effected with little danger and without a great deal of physical discomfort.

In women the most formidable and frequently the most wrecking complication is abscess of the fallopian tube. It causes long periods of invalidism. There is much immediate danger from additional infection such as peritonitis. Pain is extreme in the lower abdominal region. Usually such complication results in the permanent closing of the tube. If it occurs on both sides permanent sterility usually results. It is this too common experience that makes gonorrhea such a tragic and serious disease for women.

If an uncured woman does become pregnant she should be treated carefully to avoid serious complications. Good treatment can prevent infection of her child's eyes at birth.

18. DOES ONE ATTACK OF GONORRHEA PREVENT FUTURE ONES !

There is no such thing as immunity against gonorrhea. A patient may have any number of attacks of gonorrhea. The new infection will have a similar incubation period and similar symptoms to any previous infection. Usually it will be decidedly active.

Since gonorrhea may be acquired repeatedly, it is often a cause of poor health and economic loss.

19. IS GONORRHEA A PUBLIC HEALTH PROBLEM ?

Any disease with which two million people in this country are constantly infected is a public health problem. Gonorrhea as a frequent cause of sterility both in men and women, as a cause of severe arthritis and heart disorders, and as a cause of considerable blindness, is especially a problem for public concern. The

economic cost of days lost from work and treatment costs cannot be estimated, but they run into millions of dollars each year.

Gonorrhea present difficult problems of control. For one thing, anything like "standard" methods of treatment—such as we have for syphilis—have not been developed for gonorrhea. New drugs discovered in recent years, however, hold promise of new developments. Clinical reports at present, for instance, indicate that more than 85 per cent, of all gonorrhea cases which are hospitalized and treated with the new drug sulfanilamide are cured. But it is important to note : These were *hospitalized* cases, under the watchful eyes of doctors and nurses all day and night. At the present time so little is known about these drugs that their use by untrained persons is very dangerous. The only safe course in treating gonorrhea is to let a competent doctor do the job.

A second major item which has made control of gonorrhea difficult is that, unlike syphilis, which can be made noninfectious within a short time after treatment begins, there is no way in which gonorrhea can be made noninfectious except by cure.

Even with these drawbacks, gonorrhea can be controlled if the physicians and citizens of each community decide that the knowledge and experience of modern science must be brought to bear on the problem of venereal disea se control.

20. HOW CAN YOUR TOWN CONTROL GONORRHEA ?

Since gonorrhea is an important public health problem control measures should be undertaken by local public health departments, just as is done with typhoid or smallpox. The following six points form the essential framework for active and efficient public health control of gonorrhea :

* Each State and city health department should have a special division devoted to control of gonorrhea and syphilis, under supervision of a trained, full-time public health officer.
* An efficient and workable system of case reporting should be set up in sufficient detail so that the health officer may learn the extent and trend of the problem with which he is dealing.
* Approved and practical diagnostic laboratory services should be available without charge to all physicians treating gonorrhea.
* Adequate treatment should be available to everybody despite possible inability to pay. Drugs for treatment should be provided to all clinics and physicians without charge by the State.
* Cure is the only means available to the health officer for preventing spread of gonorrhea. There should be provided sufficient follow-up workers to locate and return to treatment patients lapsing from treatment before they are pronounced cured.
* Every public health program depends for success upon trained physicians and an enlightened public. Provision should be made in each locality for developing an informational program—both for the medical profession and for the public

(By Courtesy of Federal Security Agency. U. S. Public Health Service.)

MEDICO-SURGICAL SUGGESTIONS

VOL. IX OCTOBER 1940 NO 10

THE VITAMIN B COMPLEX

The accessory food factor which is usually known as vitamin B really consists of several components, some of which are well known and clinically tested, while the rest are still in the stage of experimentation and not yet used in human diseases. It was Eijkmann who first found that rice polishings contained a factor which presented neuritis in fowls and pigeons. He had fed them on polished rice, and his experiments proved that rice polishings contain an anti-neuritic vitamin. This vitamin is now synthetically produced, and is known as vitamin B_1 or thiamine, or aneurin.

Vitamin B_2 is another constituent, now called Riboflavin. It is often associated with vitamin B_1. It was once thought that it prevents pellagra, but later work shows that it is not so.

The P. P. factor or the pellagra preventive factor is also called nicotinic acid, and is used in the treatment of human pellagra.

The other components of the vitamin B complex are known as vitamin B_3. vitamin B_4. vitamin B_5. vitamin B_6, besides other less known factors. These components are necessary for the nutrition and growth of laboratory animals such as rats, chicks and pigeons, and their use in human nutrition has not yet been clearly and conclusively demonstrated.

Regarding the clinical aspects of vitamin B_1 it should be remembered that this vitamin is a normal constituent of nerve tissue and of the liver, kidneys, and heart, and is essential for the normal working of these viscera. It is of value for the growth of children. Among the foods that contain a large percentage of this vitamin are egg yolk, wheat germ, yeast, fresh vegetables, fresh meat, pork and ham, unpolished rice, milk, cheese. Vitamin B_1 is necessary for carbohydrate metabolism, for a deficiency of this vitamin results in defective carbohydrate metabolism and toxic products such as pyruvic acid and lactic acid accumulate in the blood stream. In beri-beri=which is undoubtedly due to deficiency of vitamin B_1, there is an accumulation of pyruvic acid in the blood and this is responsible for some of the symptoms. The addition of this vitamin

helps to eliminate the pyruvic acid and to metabolise it. The daily intake of vitamin B_1, has been estimated as 700 international units for adults and 300 to 500 units for children. Larger quantities are required in pregnancy. Less than 200 units produces beri-beri Vitamin B_1. deficiency arises from the habitual use of polished rice, which is commonly eaten in this country among the poorer class of people who are unable to supplement the diet with vitamin-containing foods. Deficiency also occurs when individuals are on restricted diets (as in the medical treatment of peptic ulcer) and also in chronic alcoholism (where there is a reduction of the quantity and the quality of the food taken).

Among the symptoms of vitamin B_1. deficiency are gastro intestinal disturbances (anorexia, flatulence, eructations, constipation and sometimes diarrhoea), cardiovascular disturbances (dyspnoea, tachycardia, arrhythmia, general anasarca, consequent on cardiac hypertrophy and dilatation) nervous symptoms (such as neuritis, neuralgia, headache, vague aches and pains all over or on parts of the body, myalgia, myasthenia), general hypotonus (as evidenced by varicose veins, varicocele, haemorrhoids, hernia, diverticulosis, visceroptosis, flat foot, wasting of the muscles). General nervous break down sometimes ensues. The administration of vitamin B_1. preparations orally or parentally relieves the symptoms in the majority of cases.

Vitamin B_2 or riboflavin prevents catract in rats and helps the growth of chicks. It has recently been claimed that it plays a part in the cure of keratitis. Riboflavin is entirely different from the pellagra-preventive factor. The foods that contain vitamin B_1, contain vitamin B_2 also.

The P. P. factor or nicotinic acid is very effective in the treatment of pellagra, the disease common in maize-eating persons. It is present in large quantity in liver, kidneys, milk, eggs, cheese.

The last word, however, has not been said concerning the vitamin B complex, and a great deal of investigation is still necessary to elucidate several dietetic and nutritional problems that arise from day to day.

Extracts.

GONOCOCCAL PROCTITIS TREATED WITH M & B 693.

Edward T. Renbom Brit M.J., London.

Apr. 8. 1939.

In a letter to the editor, the author reports the result of treatment with M & B 693 in a case of gonococcal proctitis. Three days after having rectal intercourse the patient began to suffer from pain and tenesmus, and he passed mucus and pus. Digital examination of the rectum 10 days after the homosexual intercourse was painful the sphincter being in spasm. A proctoscopic examination revealed an area of yellow mucopus on the posterior rectal wall about 2 inches within the anal margin and beneath this was a round shallow ulcer three-quarters of an inch in diameter. This ulcer was intensely inflamed but there was no bleeding. Examination of the pus and smears from the ulcer showed large numbers of gonococci.

The patient was given M & B 693, 6 tablets (3 grams) a day for 4 days, followed by 4 tablets (2 grams) a day for 4 days, and then 2 tablets (1 gram) a day for 7 more days. No local treatment was given. After a week of treatment with the drug, gonococcal vaccine given and continued for a month. Improvement began within one day after treatment with M & B 693 was started. Three days later the ulcer was bleeding freely, and the pain and tenderness had almost disappeared. In a further three days the ulcer had healed, the pain had completely gone, and defecation was not difficult. Examination of smears from the site of the ulcer revealed no gonococci, Criteria of cure included a gonococcal complement fixation test and a provocative injection of 750 million gonococci. No gonococci were found in rectal smears 2 months after treatment with M & B 693 had been discontinued.

The drug produced no toxic symptoms.

ORANGE JUICE FOR BREAST-FED BABIES.

Some years ago Sir Frederic Still scandalised many of his juniors in the pediatric world by asserting that orange juice was unnecessary for breast-fed babies under the conditions of feeding of the mothers which prevail in this country." The younger physicians were inclined to dismiss this as the dictum of one out of touch with modern developments, and they pointed to the fact that breast-fed babies could certainly suffer from deficiency diseases, of which while scurvy was certainly a great rarity, rickets was not uncommon and iron-deficiency anæmia fairly frequent. Still is, however, supported by Gyllensward of Stockholm who maintains that fruit juice is not only unnecessary but might even be harmful. He gave alternate

babies of a group a teaspoonful of orange juice daily from two months to four months of age and thereafter two spoonfuls daily, the others receiving only breast-fed milk. An inadequate supply of breast milk, or any intercurrent affection apart from digestive upsets, led to the exclusion of the baby from the investigation. Failure to gain weight is said to be an early sign of vitamin C deficiency, but there was no evidence that orange juice had any effect on the weight of these children. On the other hand, there was definite evidence that the babies receiving orange juice had more irregular and more frequent evacuation of the bowels, and their stools sometimes showed signs of faulty digestion. Similar investigations were made using lemon juice or tomato juice with similar results, tomato juice seeming to be the least easily digested. Some babies, too, developed various skin eruptions when they were having fruit juice. But it was suggested that if child-welfare centres urge the use of orange juice the public might think that the breast-milk was not a complete food. Babies lost their taste for the breast when given fruit juice and fruit juice might be responsible for acute infection of the throat. It was concluded that if any preventive treatment was required it should be directed towards making sure that the mother's diet contained a sufficiency of vitamin C. Even this was not as simple as it sounded for Herliz estimated that in the worst cases of maternal undernutrition this would mean giving a lactating mother from four to six oranges daily.

Lancet June 3, 1939, p. 1274.

RESPIRATORY EMERGENCIES.

Chandler (*Practitioner*), deals with the following as respiratory emergencies, *viz.*, (*1*) *asthma* which may be treated with adrenaline hypodermically and if adrenaline does not act quickly with morphine 1/4 grain and atropine 1/100 grain. Adrenaline to be used must be fresh and not discoloured; if bowels are loaded an enema should be given; (*2*) *laryngitis stridulosa*, may be treated with a nasal or pharyngeal spray of 2 per cent. ephedrine solution or cocaine solution 10 per cent. with care, with ephedrine by mouth and a cold pack applied to the back of the neck. The mixture containing tincture of ipecac 4 minims, tincture of opii camphor 30 minims, syrup of thymi 60 minims and aqua upto 120 minims may be of great use a can be reed afterpendat 2 to 3 hours, if necessary; (3) *severe bronchial spasm* of plastic bronchitis and emphysema may require ephedrine by mouth and an expectorant mixture containing potassium iodide, ammonium carbonate, squill and senega; (4) *spontaneous pneumothorax* which require morphine injection and oxygen inhalation (by nasal catheter) for immediate relief of pain, shock and cyanosis and the air must be allowed to escape or be withdrawn from the pleural cavity by some device if there is a

valvular slit, a high-pressure pneumothorax and a grossly displaced heart; (5) *acute pulmonary oedema* is treated with injection of morphine with atropine and adrenaline, venesection (10-12 ozs. of blood), oxygen inhalation under pressure, hypertonic glucose or sucrose solution 100 c.c. of 50 per cent intravenously; (6) *haemoptysis* if due to blood pressure may require venesection, nitrites and emetine 3/4 grain hypodermically and the usual coagulants are contraindicated; when it is due to tuberculosis a small dose of morphine gr. 1/6 only to calm the patient but not to stop the cough reflex If bleeding continues the following drugs may be used with benefit *viz.*, calcium chloride 5 c.c. of 10 per cent. solution intravenously, congo red 10 c.c. of 1 per cent. solution, hæmoplastin, coagulen Ciba 5 c.c. hypodermically and artificial pneumothorax, if all these fail; (7) *pleuritic pain* is often difficult to diagnose: if the pain is severe morphine in some form is necessary as the usual poulticing or strapping is ineffective; (8) *massive collapse of the lung* may require morphine to relieve pain and shock but the latter may prevent the expulsion of the obstruction; bronchoscopy is of paramount importance in dealing with such condition: (9) *pulmonary embolism* must be treated with full dose of morphine gr. 1 and atropine gr. 1/50; Einar Key advocates eupaverin in 0.03 gm. or 0.06 gm. doses to be given intravenously or intramuscularly.

THE USE OF SULFANILAMIDE POWDER LOCALLY IN THE TREATMENT OF CHANCROID.

Russell, J. Fields and Jacob Joseph Weinstein. Urol & Cutan. Rev. St. Louis. Dec. 1938, 42 : 880.

In an effort to improve methods of treatment of chancroid, the authors have used sulfanilamide powder locally and are reporting on 7 cases. The technic consisted in cleansing the infected areas with warm saline solution and dusting the area with the powder 4 times a day. There was no unusual pain resulting from the application.

The 3 cases which had been treated by the standard methods without improvement responded to sulfanilamide locally with complete healing of the lesion. The average number of days required for cure of these cases was 18 as compared to 80 days with the older methods. Four cases of chancroid treated with the sulfanilamide only were discharged as cured in from 10 to 29 days or an average of 16 days. Most cases showed an immediate cessation of the discharge and new granulation and epithelization about the edges of the ulcer.

The authors offer this as a preliminary report, and, since the results of this treatment were so encouraging they feel further study of the efficacy of sulfanilamide powder on chancroidal infections is warranted.

Medical Association (Bombay Branch of the Indian Medical Association) and the All India Medical Licentiates' Association, Bombay Branch while reiterating the past resolutions, once again strongly protests against the continuance of the Indian Medical Council Act 1933 in spite of the repeated protests and condemnations by the Medical Profession and urges on the authorities concerned to take immediate steps to so amend the Act as to meet with, amongst others; the following demands of the Indian Medical Profession :—

(1) Inclusion of all the Practitioners registrable by Provincial Medical Councils.

(2) Establishment of one uniform standard of Education throughout the country.

(3) Establishment of an All India Medical Register.

(4) A democratic representation of all the registered practitioners in the Council.

Proposed by :—Dr. D. G. Tendulkar,

Seconded by :—Dr. L. P. Mehta,

Supported by :—Dr. A. D. Mastaker. Passed unanimously.

(2) "Further resolved that the copies of the above resolution be sent to (1) The authorities concerned (2) Local Press (3) The Associations (4) The Medical Press."

Proposed by :—Dr. Tendulkar,

Seconded by :—Dr. M. N. Bilimoria. Passed unanimously.

Hearty vote of thanks to the Chair by Dr. S. N. Ganti,

I have the honour to be,
Sir,
Your most obedient servant,
J. B. C. DA COSTA,
President of the Meeting.

Regd. No. M. 2853.

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