

sympathy to her relations and friends. She has been a member of the Trained Nurses' Association of India since 1930.

Bearing Letters. District Secretaries, Members of Selection Committees and others are asked to kindly have outgoing letters containing more than one average sheet of notepaper very carefully weighed before posting.

Letters are constantly being received in the office with $1\frac{1}{2}$ to $3\frac{1}{2}$ annas to be paid upon them, many of these contain application forms or other enclosures.

The Annual Conference. The Annual Conference is to be held in November, the actual date and place has not yet been fixed, but it is not too early to begin to think about models for the Student Nurses' Exhibition. It has also been suggested that we should have a competition for Trained Nurses and the Secretary would be glad of suggestions.

There will be the usual bazaar and we should like to have an 8 anna stall.

Purses.—The collection of purses last year proved such a success that we hope for a larger collection this year, and although the weather is hot it is not too early to start work. Every anna helps and it is wonderful how quickly they multiply.

The Kodaikanal Medical Conference is to be held in May from the 27th to the 29th. As usual half a day is to be set aside for topics of interest to nurses, but unfortunately nobody has yet come forward to fill the programme and the half day is blank.

Will members of the T.N.A.I. and C.N.A. who are likely to be in Kodaikanal at the end of May and who are willing to help, communicate at once with Dr. Dorothy Jefferson, Regional Secretary, Madras Area, C.M.A., at 'Sunrise View,' Kodaikanal.

Secretaries' Movements.—Miss Burrows has asked us to announce that she will be going on leave on May 1st and Miss Lakdavalala, K.E.M. Hospital, Bombay, will 'act' as 'Secretary' in her absence. Members needing concessions should write to her marking their envelopes T.N.A.I.

Miss Hartley hopes to be at 'Gainsford', Coonoor until about the third week in May.

CHESTNUTS

Plain Jane (with pride): The man who'll marry me has never been born!
Pretty Jane (pityingly): Yes, and the worst of it is, his mother is dead.

The General and Maternity Hospitals stood side by side. One day an old man was admitted in a furious temper, because he said he had been taken to the 'Maturity Hospital by mistake.'

The next day a woman patient took great exception to some harmless question asked by the doctor and said indignantly. 'Anyone would have thought I was stagnant.' To this day the Maternity Hospital is known to the nurses as the 'Maturity Hospital where the stagnant women go.'

Small Patient (just admitted): 'Lady, Lady I wants you Lady.'
Nurse (Rather bitterly): you're making a mistake Sonny, I'm not a lady, I'm a Nurse.

PNEUMONIA

By MALE NURSE DANIEL,

American Mission Hospital, Miraj.

Pneumonia. When the air cells of the lungs are inflamed the patient is said to have Pneumonia. It is an acute infectious disease caused by *Pneumococcus* associated with general toxæmia and consolidation of one or more lobes of either or both lungs.

It occurs in all ages. It is extremely fatal to the very young and the old. One attack confers no immunity. It is common in winter and spring but occurs in all seasons. Common causes are severe fatigues over-exposure to cold, habitual intemperance, insanitary working conditions.

Varieties of pneumonia—(1) Acute Lobar Pneumonia or Croupous Pneumonia. Inflammation of one or more lobes of the lung. (2) Bronchial Pneumonia. It is a combination of Pneumonia and bronchitis. (3) Hypostatic Pneumonia occurring in the aged and feeble, attacking the most dependent part of the lung. (4) Septic Pneumonia. Resulting from inhaling septic material.

Symptoms

1. Onset is sudden with rigor and sudden rise of temperature 103° F.-104° —or even more. If the patient is a child may have convulsions and vomiting.
2. Sharp pain over the affected side.
3. Short and frequent cough without much expectoration in the beginning.
4. Scanty, tenacious, and rusty sputum.
5. Respiration is fast, painful and laboured. From 30-70.
6. Pulse rapid from 110-120. Not proportionate to respiration.
7. Highly coloured urine.
8. In a typical case temp. remains up for 5-10 days and then falls by crisis; unless there are complications.
9. Herpes appear on the lips.
10. Malar paleness, flushed face, dilated pupils.
11. Diminished chest movements on the affected side.

Dangerous Symptoms. Marked dyspnoea. Thready, small, irregular pulse. Delirium with moderate fever, extreme restlessness, cyanosis, an anxious, pinched expression of face. Persisting respirations above 60 per minute and pulse above 120 and dry tongue. Outlook is grave when the disease occurs in patients over sixty years of age, in drunkards and in those who are subject to heart or renal disease. When the leukocyte count is high.

Nursing and Treatment. Isolation. Lobar Pneumonia can be isolated by the medical aseptic technique. Individual utensils should be provided including a thermometer kept in some antiseptic solution.

Rest. The great danger in acute Pneumonia is the danger of heart failure, since a serious strain is put upon the weak right ventricle owing to the block in the vessels of the inflamed lung. The patient should be kept at absolute rest. Energy conserved by avoiding unnecessary movements, may be just that amount required to save an otherwise fatal case. Patient should not be allowed to sit up to use bed pan or urinal. Visitors should be prohibited during rest hours; they should be few and their stay must be brief at all times. From the beginning the nurse should plan her work to save the patient's heart any added burden. The work should be so arranged that the patient may have as long periods of rest as possible. He should not be allowed to brush his teeth or feed himself.

Fresh air. Room should be well ventilated but without draughts.

Clothing. Should be warm but light. A woollen jacket should be worn at all times. Blankets may replace sheets. The bed must be kept clean, warm and dry; moisture favours the development of pressure areas or sores. Clothes and bedclothes should be changed as soon as they become moistened with perspiration. A tight jacket may relieve plueritic pain but increases dyspnoea.

Care of the mouth. Patient's mouth and teeth should be kept scrupulously clean by the nurse. In the majority of cases pneumonia follows infection of the upper respiratory tract. Mouth breathing is very common,

frequently it is due to nasal block. The dry, dirty oral cavity furnishes an additional site of potential danger. Recent careful studies have substantiated the belief that proper attention to mouth and nose lessens the danger of reinfection or superinfection. Moreover the sense of taste also improves, which makes the patient find it easier to maintain the adequate intake of fluid and food. The entire oral cavity should be cleaned every two hours by some alkaline mouth wash and followed by the application of glycerine and borax, or glycerine and tannic to tongue. Nose, too, should be kept clean by nasal spray.

Bowels. In the early stage laxatives may be given, and later enema given. To a certain extent abdominal distension is present in all cases. When it interferes with respiration it may be treated with Flatus tube or stupes and if persisting pituitrin may be used.

Position. A comfortable position is important. The fowler or semi-fowler position is usually selected particularly if respiration is laboured, but occasionally a patient prefers to lie on his back or on his side. He should be changed frequently from side to side or from side to back. This not only adds to the patient's comfort but helps to prevent hypostatic congestion from developing, aids circulation and coughing up of mucous.

Diet. Diet should be liquid, nourishing and easily digestible. It should be served at frequent intervals and in small quantities. The patient must be fed by the nurse until he is definitely convalescent. Milk usually constitutes an important part of the diet, although in some cases it causes abdominal distension. Two pints of milk is sufficient. Milk can be given plain or flavoured. It may be used in preparing cream soups, custards or ice cream. Small amounts of water should be offered frequently. Some persons find physiologic salt solution more palatable and there have been studies which suggest that a high salt intake may be of value during the febrile stage. Fruit juices are usually acceptable such as orange juice, grape juice, grapefruit juice, etc. Lactose or glucose may be added to the above to increase the caloric value without rendering them too sweet. Tomato juice, broths or thin soups containing strained vegetable are also given. Coffee should not be taken to excess, but in moderation it may prove to be valuable. In the unexpectedly severe depression which may follow the use of a sedative or in sudden collapse, strong coffee by bowel supplies heat, fluid, and a pharmacologic antidote and a stimulant. Eggs can be given along with milk. The ultimate outcome of the patient depends very often upon whether the patient has been properly nourished or not, and whether the patient has been allowed to become dehydrated.

Drugs. In early stages mild diaphoretics are given. When there is much cough and restlessness expectorants and sedatives are generally prescribed.

Hyperpyrexia is generally treated by cold; hot or tepid sponging and application of ice cap and cold compresses. When there is persistent high temperature cold enema may be given, but it is more exhausting to the patient. Chest pain may be treated by poultices, antiphlogistine and ice cap. However the temperature will be high up to 104 or more.

Coughing and difficulty in breathing. Coughing is present always and is a troublesome symptom which needs consideration. It may be more at night and may interfere with sleep. Codeine is generally given by the order of the physician. Steam inhalations are very effective inasmuch as keeping the air thoroughly moistened can be considered an important measure in thinning the mucus. Drinking of hot milk alleviates cough and induces sleep.

Cyanosis may be treated by bleeding the patient from 15-20 ounces and oxygen inhalation. The rational method of treating cyanosis is by the efficient administration of oxygen. Inhalation of 40-60 per cent. oxygen raises the arterial oxygen saturation up to near the normal level in the

majority of cases, exhibiting arterial anoxæmia, and this rise is accompanied by definite signs of clinical improvement such as disappearance or diminution of Cyanosis, showing pulse with corresponding improvement in quality. Slowing of respiratory rate and subjective improvement.

Delirium may be treated by ice bag, cold compresses and cold sponge.

Crisis usually occurs about the 7th or 9th day. As the word suggests crisis is a very critical period. Owing to the sudden drop in temperature, loss of heat, profuse perspiration, and relief of strain on heart. Marked depression and collapse may occur with a weak rapid pulse, sub-normal temperature, cynaosis, cold, clammy sweat. The patient must be watched very closely when the crisis is due and must receive the most expert nursing throughout. Body must be kept warm by applying hot blankets and hot water bottles. Patient may soon go to sleep. He must be allowed to do so, but his pulse must be carefully watched and he should be kept warm, after sleep he must have a hot sponge and hot drinks. Stimulants may be needed for extreme weakness. Heart weakness may call for the use of Strychnine, Digitalis, Strophanthus, Ammonia, Camphor in oil, etc. Atropin may be given hypodermically for profuse sweating.

Serum Treatment. Antipneumococcus serum is used as the specific treatment. It is said to have reduced the mortality from 20 per cent. to 10 per cent. and is therefore of great therapeutic value.

Administration of serum.—If the case allow of delay, an hour or two preceding the intravenous injection an intracutaneous injection is given and area watched for local œdema and erythema which indicates that the patient is sensitive and that special care must be taken in the use of serum. The serum is warmed to the body temperature to prevent severe chill and injected intravenously. The patient should be watched closely for any symptoms of unfavourable reaction, such as sudden flushing of the face, restlessness, uneasiness—increased pulse rate, difficulty in breathing and urticaria with a possible serious collapse and fatal outcome. In many cases serum sickness, urticaria, œdema of the skin, joint pain, enlarged glands and rise of temperature may follow after a week or two after the injection. Average dose—to adult 100 cc. every 12 hours or 6–8 hours until the disease is checked.

Cold open air treatment. In patients in whom the vital centres, the heart and other organs are poisoned by toxins, and the respiration and circulation are interfered with thus all the body cells are in need of oxygen, the beneficial effects of cold fresh air are particularly valuable. Pulse becomes slower, stronger, the appetite improves and cyanosis, headache, delirium, restlessness, and sleeplessness are relieved. During the treatment patient should be carefully watched and protected from draught. Only the face should be exposed. Extremities should be kept warm with hot water bottles. If the body becomes chilled the congestion and all other distressing symptoms, pain, cough, dyspnoea and cyanosis etc., will be increased and the patient should be taken to room.

General Management. Patient's room must be well ventilated and kept at a temperature 65°F–70°F. The bed should be comfortable. The covering should be light and warm. Discharges from nose and mouth should be collected on gauze or cotton and should be burned. Intake and output must be recorded. Pulse, temperature and respiration should be recorded every 2 hours in the early stage and afterwards every 4 hours.

Convalescence. The patient must not be allowed to sit up or allowed any unusual exertion without special orders from the doctor. Because the danger of sudden death from the failure of the weakened heart muscles. When allowed to sit up the pulse should be watched. Sudden death from pulmonary embolism also is to be feared, because during convalescence

resolution is taking place. The importance of the care of the convalescing pneumonic patient is rebuilding the entire body in a slow and sure manner.

Complications:—

1. Empyema or pleural effusion.
2. Endocarditis or pericarditis with effusion.
3. Pneumococcal meningitis.
4. Otitis media in children.
5. Hypostatic oedema and hyperæmia of the unaffected lung in old people.

Pneumonia is a complication in measles, influenza, some diseases of the mouth, bronchitis, and it is often met as a post-operative complication which is called post-operative pneumonia.

Post-operative Pneumonia is one of the most serious complications which develops too frequently after operations, although with proper care before, during and after operation. The prognosis is always very grave particularly in very old and very young owing to their low vitality. In all cases it adds greatly to the discomfort of the patient. Coughing causes severe pain and serious strain on the sutures of the wound and in every way makes the outlook less favourable. The responsibility of prevention rests largely with the nurse, for where there is no pre-existing cause pneumonia is the result either of a poor anaesthesia or poor nursing, and a poor anaesthesia and other factors may be counteracted by good nursing.

Pre-operative preventive Measures. A nurse should carefully note and report any pre-disposing cause such as inflammation of the upper respiratory tract (sneezing, coughing, coryza etc.), disease or congestion of lungs or some form of heart disease, where ether anaesthesia is avoided as it depresses the respiratory centre; as it increases the local irritation and congestion and so forms a suitable soil for the invasion and growth of bacteria. Special precautions should be taken to see that the mouth, nose and throat are well cleaned, avoid exposure to chilling during the preparation of the patient and in all other treatment. Old people must have extra supply of warm clothing. See that the patient is quite warm when he is taken to the operating room. Patient should be calm, reassured and in a cheerful frame of mind.

During and after operation. A prolonged anaesthesia is avoided whenever possible. While the patient is under anaesthetic and later, precautions must be taken to keep the nose, mouth and throat free from mucus, vomitus and blood and prevent their inhalation. Avoid exposure and keep the patient warm with special care when bringing from the warm operating theatre and also when restless. The chest and extremities particularly must be kept warm by the use of a chest protector, flannel stockings and hot water bottle. The patient should be kept dry—when bed linen or gown get wet with perspiration they should be changed immediately. Exposure and chilling are specially dangerous after ether, because ether causes perspiration and dilatation of the blood vessels in the skin; chilling of the body surface would cause these vessels to contract and drive the blood to the interior thus causing congestion of the lungs and other internal organs. The room should always be quiet and warm with plenty of fresh air but no draughts.

All suspected patients should be turned from side to side or from side to back as often as their condition permits. Turning prevents congestion, aids circulation, coughing up of mucous. Nothing should be allowed to interfere with their breathing, positions, pressure, obstruction, distension, etc. They should be encouraged to breathe deeply. Thus more lung tissue is brought into exercise.