

CASE STUDY

By a *STUDENT NURSE, Medical College Hospital, Vellore*

Patient's name—Lakshmi. *Age* —12.
Sex —Female. *Nationality*—Indian.
Occupation —School Girl.
Diagnosis —Chronic nephritis.
Chief complaints and their duration—Ascitis and oedema for 1-2 weeks.
Other outstanding symptoms—Dyspnoea, frequent small motions, diminished urine, cough and slight anaemia.

Possible causes of symptoms: as interpreted by Student Nurse.

Dyspnoea may be due to pressure of the abdominal fluid against the heart and diaphragm.

Diminished urine—Due to the inability of the inflamed kidneys to excrete waste products.

Cough—May be due to dry throat, bad tonsils, irritation of the respiratory tract and also due to pleural cavity being filled with fluid, i.e., due to pleural effusion.

Small motions—This nephritis may be a complication of dysentery.

Anaemia; decreases of HB% in the blood which may be due to poor diet, and dysentery.

Important facts in family, social or occupational history influencing the development of this disease. An uneducated village girl, having no good food or clothing and ignorant about cleanliness and nutrition. Father and mother alive; had three brothers and one sister.

Consider patient's mental attitude, personality, financial or family worries, health habits, previous illness or operations etc.

On admission she was so sick that it was very difficult to understand her mental attitude and personality, but she was not happy. Had no family or financial worries.

After treatment she became somewhat improved and so began to take medicines and treatments without any refusal. Her urine began to increase little by little; but the motions were continuing in the same way. Became more cheerful. Two years ago she had diarrhoea with mucus and blood stains and no further diarrhoea.

Physical findings and their significance.

Mouth and tongue coated—It is abnormal, may be due to infection. No pyorrhoea.

Diffused pulsation over the second, third and fourth intercostal spaces. Cannot make out the borders of the heart.

Heart is displaced to the right side. Sounds hardly heard over the usual cardiac region. Better heard on the right side. It is abnormal. May be due to the collection of fluid in the chest and pleural cavities.

Pulse—Thin and rapid—abnormal—may be due to low blood pressure and poor circulation.

Lungs—Expansion poor on the left side—abnormal,

Spleen and liver—not enlarged—normal.

Knee jerks and ankle jerks—present—normal.

Flexor—response in both—normal.

There was some pleural effusion—abnormal.

Lab. Findings and Significance.

Urine for routine—Alkaline—May be due to the food.

Catheterised specimen of urine.

Alkaline—normal urine is faintly acid.

Alb. trace—may be due to the inflammation of the kidneys.

Pus cells—may be due to the inflammation of the urinary tract.

A number of gram. neg. rods and gram. neg. extra-cellular diplococci found. It shows the inflammation of the bladder (cystitis).

Epithelial cells—This shows that the epithelial lining has been broken due to inflammation of the kidney tubules and is excreted through the kidney. This is an abnormality.

Faeces for routine—

Negative for ova. This means no infection of worms.

F. Faeces—no amoeba and cyst. Macrophages found.

R.B.C. present, pus cells and some mucus. This shows that there is an indication of bacillary dysentery.

R.B.C.—Ulceration of the intestines.

Blood for malaria. No malarial parasite found, no malarial infection.

Blood culture—*Bacillus coli.*

Mantoux test—Negative—This shows that there is no indication of T.B.

Salivary Urea—72% above normal. This shows that the blood urea too is high or the kidneys are not working properly.

Pleural fluid—Alkaline, sp. gravity 1004, no organisms, *R.B.C.* present, endothelial cells present.

Ascitic fluid—Alkaline, sp. gravity 1008, no organisms for abnormal cells.

Op. procedures, and path. findings (if any). No operation before.

Doctor's orders for the patient.

Medicines—Alk. mixt. 3 dr. 3 hourly.

Castor oil 3 dr. T.I.D.

Pituitrin M VII—B.D.

Novocaine

Morphia—G.1/12

Atropine—Gr.1/200

Sed. cough mixt.—3 T.B.D., P.r.n.

Spt. Amm. Arom.—M X

Diuretin—G.V. TGD.

<i>Diet.</i>	<i>Treatments</i>
Fluids only $1\frac{1}{2}$ pts.	Bowel wash.
Boiled water.	Hot fomentation to kidney region.
Orange juice.	Subcut. saline.
Marmite.	Abdominal tapping.
Eggs.	X-Ray of chest.
Fruit and vegetables.	Aspiration of the pleural cavity.
Conjee B.D.	Mouth washes TID
Yeast $\frac{1}{2}$ oz. B.D.	Ice compress to throat.

Purpose of medication treatments, diet, etc. Alk. mixt. given to put blood in right condition for kidneys to remove toxins. Castor oil given as intestinal antiseptic. Pituitrin given to increase the output of urine, to treat distention, and as a treatment of poor peripheral circulation.

Novocaine given as a local anaesthetic for abdominal tapping. Atropine and morphia to keep the patient quiet when she was restless. Sed. cough mixt. given to check the cough. Spt. amm. arom. to prevent collapse. Diuretin to increase the output of urine.

Bowel wash given to reduce the number of motions after washing away the irritating matters from the bowels. Hot fomentation to increase the output of urine. Subcut. saline given when she was not taking fluid by mouth well and also to remove the toxins by producing a reaction. Abd. tapping done to withdraw the fluid from the abdomen. X-Ray taken because the chest cavity seemed to be filled with fluid and it proved that the pleural cavity was filled with fluid.

Aspiration done to withdraw the fluid from the pleural cavity. Mouth washes given to prevent sordes collecting in the mouth. Ice compress applied to throat as she complained of pain in the throat.

Diet. Barley water, etc. given to increase urine and limited quantities of fluid given to prevent the collection of fluid and other diet given for the growth of the body and to balance the loss of waste materials.

What nursing service will be most beneficial to the patient? How and why? Daily cleansing bath is necessary to keep the pores in the skin open and thus excrete waste products. Ice caps, compresses and cold sponges to reduce temperature. It is very important to measure the amount of urine, examine it daily for albumen and notice its colour. Must keep the bowels and skin opened. Warm sponges to avoid sleeplessness. Put the pt. in a position which seems to be comfortable for her. Attend to the back to prevent bed sores, by washing with soap and water, drying, and then applying methylated spirit and powder.

Care of mouth. Mouth washes before and after every feed. Must watch the motions well and record. Must have a careful record of the intake and output of fluid.

Diet. We have to be very careful about the diet. It must consist of high protein, meat extracts, fish, etc., as for this type of chronic nephritis a high protein diet is allowed and is necessary in treatment of the type of bacillary dysentery common in South

India. When the amount of fluid is limited we must be very careful not to give anything more than the doctor allows.

Arrange the bed in the way in which the patient is most comfortable.

What (if any) sanitary and hygienic measures will contribute to the prevention of this disease? Nephritis can occur as a complication of typhoid dysentery, malaria, heart diseases etc. It can also come due to high temperature and due to toxins; as in both cases the kidneys have to overwork. So if we can guard people against all these diseases we can contribute to the prevention of nephritis. That is, the surroundings must be clean, food should be protected from flies and contamination, and the water supply must be pure and uncontaminated. Moreover careful attention to the disposal of excreta, as flies and water may carry infection from excreta.

Full account of disease with reference given to sources from which information was received. Two years ago the patient had frequent yellow watery motions with blood-stained mucus which lasted for ten days. After that she was all right.

Again two months ago she began to have small frequent motions, scanty urine. The legs and hands began to swell up. Abdomen began to be filled with fluid. Face became puffy. There was cough and difficulty in breathing.

When she was admitted she had oedema, diminished urine, dyspnoea, small frequent motions, ascitis and slight cough, and was somewhat anaemic, with temperature 100° on admission.

After treatment she began to improve not only physically but mentally too. Urine began to increase little by little, cough also began to get better and she began to be somewhat cheerful. Yet the motions were continuing and the abdomen was filling up again. By this time her parents were so stubborn and were not willing to keep her in the hospital for such a long time, merely due to their ignorance, so they took her home against advice on the 20th day after her arrival in the hospital.

Sources of information:—

Patient's Medical History Sheet. Doctor. Class Notes & Textbook.