

B.—GENERAL SURGICAL NURSING OF SICK CHILDREN.

1. What do you mean by—(a) Septicæmia; (b) Pyæmia; (c) Cellulitis? Describe in detail the nursing of one of these.
2. A child is admitted to Hospital following a fall on to the head. By what signs would you suspect serious injury? How would you handle such a case?
3. How would you prepare for an emergency operation in a private house?
4. How would you syringe an ear in a child of 2 years? For what is this done, and what lotions may be ordered, and at what temperature should they be used?

NURSING JOURNAL EXCHANGES

Early Danger Signals of Cancer

BY A. R. KILGORE, M.D.

THE normal development of every individual starts with a single cell, the egg. When fertilized, the egg cell divides into two cells, these again into four, these into eight and so on until a round ball of 64 to 128 or more cells is built up. Each cell looks exactly like every other cell in the ball, yet in the further growth of the embryo one group of cells becomes the nervous system, another the skin, and another the bones, etc. And after maturity is reached new cells are constantly formed as they are needed to replace damaged ones, always in strict relation to surrounding cells and to the needs of the whole body. When a wound is made in the skin new cells are promptly thrown out to heal it and as soon as healing is complete, no more new cells are made. What constitutes the control that regulates this marvelous growth and replacement of cells, we do not know. Whether chemical, physical, electrical, inside the individual cell or without it, the whole process is a mystery and constitutes, of course, the mystery of life itself.

But we do know that occasionally some accident happens that breaks one cell away from control. Such a cell retains the power of reproduction and does produce hundreds and thousands of cells like itself out of control—a mass of cells without normal relation to surrounding tissues—a lump or tumor finally large enough to see with the naked eye.

If such a tumor has the power to break off bits of itself, which when carried by the blood or lymph stream to distant parts of the body will start new growths like the parent, we call it a malignant tumor or a cancer.

What kind of an accident it is that causes one cell to get out of control we do not know and perhaps can not expect to know until we understand more about the normal process of life. But whatever the cause of the accident, the important thing is to know that it is a local happening and not a constitutional disease and that if the cells that are out of control be removed before they are scattered, the disease will be cured—hence the urgent need of early treatment.

The earliest sign of a cancer, therefore, is a lump. If this lump is on the surface of the body, in the mouth or in the breast, it can be seen or felt very early and these are the most hopeful cancers for cure, because very often the lump can

be discovered and removed or destroyed before it has had time to spread from its point of origin. If the tumor is in the uterus or the bowel, it may call attention to itself by early bleeding or unusual discharge, and if such signs are attended to promptly, cancer of the uterus and bowel are often curable.

But, if the lump is in the stomach or other internal organs, its early recognition may be impossible, because by the time pain appears the cancer has usually spread (or metastasized) beyond reach by any surgical operation.

That cancer, if properly treated early enough, is curable is demonstrated by the fact that thousands of persons who have had true cancers removed have remained free of cancer the rest of their natural lives.

In order to reduce the present death-rate from cancer, it is essential that popular knowledge of the early danger signs of *curable* cancers should be widespread. The problem is not unlike that of tuberculosis. A generation ago, "consumption" was regarded as invariably fatal. To-day, everyone knows that a chronic cough, bloodspitting, night sweats, loss of weight, may mean early tuberculosis and everyone also knows that early tuberculosis, properly treated, is curable. This popular knowledge comes not by accident but from organized public education by the anti-tuberculosis societies and the medical and nursing professions. The result of this widespread knowledge has been a reduction in death-rate from tuberculosis of 40 per cent.

The important danger signals of curable cancer are as simple as those of tuberculosis and it is only necessary to popularize them to see an important reduction in deaths from cancer. Every one should know that the following signs *may mean cancer* :

- (1) A sore in the mouth that remains unhealed more than three weeks.
 - (2) A wart or small hard lump on the lip.
 - (3) "Horny warts" on the skin, especially if they begin to grow, to become raised, or to scab or weep.
 - (4) Brown or black, *raised*, smooth birth marks.
- These give little or no warning when they change to cancer and should be removed before they have a chance to become malignant.
- (5) Any lump in the breast of an individual over 25 years of age. It is especially important to know that the lump of cancer is more often painless than painful in the early stages.
 - (6) Unusual bleeding or new discharge (especially if foul) from the uterus.
 - (7) Bleeding or discharge from the bowel, or sudden obstinate constipation or diarrhoea.
 - (8) Bleeding from the bladder.

It would be unfortunate to give the impression that any one of these signs always means cancer. Most birthmarks are harmless. Only one lump out of every four that occur in women's breasts is cancer. Bleeding from the bowel is usually due to hemorrhoids. Bleeding from the uterus means cancer only once in fifteen times. The important thing is to know that they *may mean cancer* and should be investigated by a physician at once. If cancer is not present, no harm has been done. If it is beginning, a life may be saved that could not be saved a few months later.—*From Pacific Coast Journal of Nursing.*