

NURSING JOURNAL EXCHANGES

Cancer of the Uterus

BY ARNOLD WALKER, M.A., M.B., F.R.C.S.

(From 'the Nursing Times'.)

Cancer, or carcinoma, may originate in any part of the body in which there is a surface covered by skin or mucous membrane. Such surfaces may be as diverse as the skin, the mouth, the gastro-intestinal canal, the small ducts and glands of the breast, and in certain portions of the uterus, which will be considered later.

Cancer may be defined as a process in which the cells forming such a surface increase in number and grow irregularly so that their orderly arrangement is lost. They become heaped up, and spread not only over the surface, but also into the deeper tissues, destroying whatever they may meet.

During this process of penetration, vessels of two types may be opened—blood-vessels and lymphatic vessels. The former may carry a minute fragment of cancer cells to any part of the body, while the latter may carry a similar fragment to the nearest lymph gland, which acts as a filter. Wherever a cancer cell becomes implanted it proceeds to grow and multiply, and so far as is known nature has no way of curbing this growth.

The weapons available at the present time in the fight against one of the most appalling enemies of mankind are surgical removal, the use of certain rays provided by radium and X-rays, and possibly certain preparations made from lead and other heavy metals, which seem to have the power of picking out the cancer cells and destroying them.

In order to understand how cancer may attack the uterus, it is necessary to remember certain points about the anatomy of the organ. The uterus may be compared to a flattened pear which is resting at an angle on the open end of a tube, the vagina, to that the thin end of the pear projects into the tube. The uterus consists of two portions, the body, which forms about two-thirds of the organ, and the cervix or neck, which is the portion of the uterus which joins the body to the vagina. The body of the uterus and the canal of the cervix are hollow, and are lined by columnar cells similar to those lining the intestine, while that portion of the cervix which projects into the vagina is covered by flat cells similar to the cells which form the skin.

Cancer may therefore arise within the cavity of the uterus or cervical canal, in which case it will be of the variety known as columnar, called carcinoma, or it may arise on the vaginal surface of the cervix, in which case it will be a flat or squamous-celled carcinoma, which is also known as an epithelioma. This latter is by far the commonest variety of cancer of the uterus.

Fortunately, cancer of the uterus remains localised for a considerable period to that portion of the uterus in which it has started. It is rarely carried to distant parts of the body by the blood stream, and is carried to the neighbouring lymphatic glands in only about one-third of the total number of cases. In most cases of cancer in other organs the disease is spread to other parts of the body. The commonest method, therefore, by which cancer of the uterus spreads and eventually kills is by local infiltration. It spreads over the surface, and deeply, until it has reached the surrounding organs.

Cancer of the body of the uterus, if neglected, will eventually penetrate the wall of the uterus and involve the peritoneal cavity. Secondary deposits may then be found on any abdominal organ.

Cancer of the cervix, whether within or without the cervical canal, will eventually reach those organs which are in close anatomical relation to it. In front lies the bladder, on each side lies a ureter bringing urine from the kidneys to the bladder, and behind lies the rectum. Below is the vagina. Further away lies the bony pelvis and the tissues which are situated on its wall—the great vessels and nerves of the lower limbs and the lymphatic glands draining the lower limbs and the pelvic organs, including the uterus.

Cancer grows in every direction, so that a growth of the cervix may involve the vagina by surface spread and the other organs by deep infiltration. If the bladder or rectum is involved, the result will be a fistula, as the cancerous tissue will slough away and leave a hole through which faeces or urine will be passed into the vagina. If the ureters are involved they will be blocked, and urine will be prevented from entering the bladder. This eventually results in death from kidney bankruptcy—that is, uræmia.

If secondary deposits of the growth occur in the lymphatic glands on the side wall of the pelvis, the nerves and vessels are pressed upon by the steadily growing glands, and eventually are infiltrated by the growth. This results in severe pain, usually referred to the distribution of the great sciatic nerve, and possibly paralysis of certain muscles in the lower limb.

Cancer, except in closed situations such as the breast, causes hæmorrhage and discharge. The bleeding occurs because blood-vessels are eaten into and opened by the growth. The discharge is the result of infection. Any surface growth is usually heavily infected with organisms.

A woman suffering from cancer of the cervix which is beyond treatment will eventually die from one of the following causes, unless she contracts some other disease such as pneumonia: (1) weakness; this is due to persistent small hæmorrhages and to the continuous absorption of poisons from the infected growth. (2) Hæmorrhage; a relatively small loss of blood may kill the patient suffering from advanced cancer; a definite hæmorrhage is the result of erosion of an artery of reasonable size. (3) Uræmia; the result of kidney destruction due to back pressure from the obstructed ureters.

The treatment of cancer of the uterus may be divided into three main headings: (1) operative; (2) radium and X-rays; (3) palliative.

Operative treatment is restricted to those cases in which the growth has not involved the surrounding organs.

In cancer of the cervix the only operation which has been found to be of real value is known as Wertheim's operation. This is a very severe operation, and consists of removing the whole uterus and the upper part of the vagina from the abdomen. The vagina forms a sheath in which the growth is enclosed by clamping the vagina above the point of section. The lymphatic glands on the side of the pelvis are then removed. This operation is usually performed under ether anæsthesia, combined with a spinal anæsthetic to lessen the shock.

Some surgeons prefer a course of douches before operation, others prefer to leave the growth alone. If douching is necessary, the nurse must be as careful as possible not to bring on unnecessary bleeding. It is particularly important for the bladder and rectum to be empty at the time of the operation. The operation is difficult enough with a clear field, and becomes well-nigh impossible if the rectum is full of faeces. The bladder is catheterised after the spinal anæsthetic has been given. The vagina is then packed with a roll of gauze

soaked in antiseptic. This pack has to be removed by a nurse during the operation.

When the patient returns from the theatre, the foot of the bed should be raised for a few hours, as the blood-pressure is low, and hence the patient is liable to die of syncope if the supply of blood to the brain is not assured. The surgeon will probably order salines to be given, either rectal or subcutaneous. In exceptional cases intravenous saline or blood transfusion may be needed.

The bed should be carefully warmed before the patient's return, but no hot bottles must be allowed for several hours, as the patient's legs may be insensitive for some time as the result of the spinal anaesthetic, even though she has recovered from the effects of the ether. There is an axiom which many nurses still seem to forget—that hot bottles plus an unconscious patient produce an action for damages. An electric hot-air cradle is very useful, but the patient must be protected from excessive heat by two or three thicknesses of blanket.

The complications are those of any severe operation.

For cancer of the body, removal of the whole uterus (*i.e.*, pan-hysterectomy or total hysterectomy) is performed. As the vagina is not involved, it may be left behind.

The results of these operations are good when compared with operations for cancer elsewhere. There is an operative mortality of 15 per cent for the Wertheim operation. The ultimate statistics show that more than half the cases are free from recurrence at the end of five years after operation. In cancer of the body of the uterus the results are better.

X-RAYS AND RADIUM

X-rays are probably valuable as a prophylactic measure after operation, to kill any stray cancer cells which may have been left behind at the operation.

Radium is undoubtedly a most valuable agent in the treatment of cancer of the cervix. Excellent results are reported from the Continent, and in Sweden we are told that operation has now been abandoned, as the results of radium are better.

So far the published results in this country are disappointing. We find that radium does a great deal to relieve the symptoms of the disease, but its rays do not penetrate sufficiently far to destroy the outlying cancer cells. In the majority of cases it stops the bleeding and discharge and makes the patient very much more comfortable.

During the last two years the Swedish method has been employed over here in certain centres, with results which seem to be far better than were obtained before, but we do not feel justified in treating operable cases with radium.

PALLIATIVE TREATMENT

A foul bleeding growth may be temporarily improved by cauterisation, diathermy or the application of certain chemicals such as acetone, but the main treatment is in the hands of the nurse. She must keep the vagina as clean as possible by regular douching, and if fistulae into the bladder or rectum occur this becomes increasingly difficult. The skin around the vulva and anus is very liable to become sore and excoriated, and needs a lot of attention.

It is advisable to withhold morphia until near the end, as morphia given repeatedly ceases to have effect and causes the patient to lose her self-control. This adds to the misery of the patient and her friends, and makes the task of the nurse an unenviable one. It is in such cases as these that a nurse shows her real qualities.