

# HAND SURGERY AFTER BREAST CANCER TREATMENT

The lymphatic system consists of a network of vessels that carry a clear fluid called lymph from the body's tissues. Lymph contains protein and white blood cells (cells that fight infection). Lymph is filtered through lymph nodes and eventually drains into the blood stream. The lymphatic system can carry and filter cancerous cells. If they are not successful in destroying the cancer cells, the nodes may become sites of secondary tumours.

Breast cancer treatment often causes loss of lymph tissue in the armpit (axilla). This is due to scarring caused by radiotherapy or surgical removal of the lymph nodes. The loss of lymph tissue limits lymph drainage from the arm, which may sometimes lead to a build up of lymph fluid in the tissues and swelling of the arm (lymphoedema).

There is evidence that some hand conditions such as carpal tunnel syndrome and trigger finger are commoner after breast cancer treatment on the same side, particularly if some swelling has occurred. These hand conditions can cause pain and functional problems and deserve treatment.

## Standard advice

Patients are advised to avoid using the arm on the side of surgery and/or radiotherapy to the lymph glands for blood pressure measurements, injections, blood samples or intravenous drips. The advice provided is a sensible precaution although there is no evidence that any of these interventions increases the risk or severity of lymphoedema.

The principal risk to the lymphatics is posed by infection, which can damage the remaining lymph channels. Patients need to be careful to avoid cuts and abrasions when gardening and should wear gloves.

## Is hand surgery safe if I have had breast cancer treatment on the same side?

Patients may have been advised to avoid surgery on the hand because it can increase the formation of lymph. Swelling can occur after surgery in patients with or without lymphoedema but the effects are temporary. There is no evidence that hand surgery causes the onset of lymphoedema or a permanent worsening of existing lymphoedema unless and very rarely when the operation is complicated by infection.

## Are tourniquets safe to use during hand surgery if I have had breast cancer treatment on the same side?

Tourniquets (tight bands around the arm or forearm) are often used to prevent any bleeding in the area of the surgery and reduce the chance of complications. Current evidence suggests that tourniquets can be safely used in patients who have had breast cancer treatment.

## Will I need any additional precautions after the hand surgery?

The principal risk is infection rather than the operation itself. Infections are not more common after treatment for breast cancer but if they occur, they need prompt treatment. You will therefore be under closer surveillance after your operation in order to monitor progress. If there are any signs of infection such as pain, throbbing, redness, discharge around the wound, fever or if you feel unwell then contact your surgeon as soon as possible.

If you have a painful or disabling hand condition, there is no good reason to avoid having surgery to improve your quality of life but maintain good communication with your surgeon afterwards.

