



مركز الكويت لمكافحة السرطان  
Kuwait Cancer Control Center

## Sentinel Lymph Node Biopsy of the Breast

Patient Education



Developed in partnership with



After being diagnosed with breast cancer, the doctor will discuss some treatment options with you. The standard surgical treatment includes removal of the tumor and assessment of lymph nodes in the axilla.

### There are three reasons why lymph nodes in the axilla are removed from patients with breast cancer:

1. To know whether cancer has spread to the nodes.
2. To reduce the chance that cancer will re-grow in the axilla.
3. Removal of the lymph nodes may improve survival.

### Axillary Node Dissection (Clearance)

The traditional procedure for staging breast cancer used to be a surgery called an Axillary Lymph Node Dissection (ALND), which involves removing most (usually 10-30) of the lymph nodes in the armpit closest to the breast. This is generally a safe procedure; however, it is associated with postsurgical complications such as movement problems in the shoulder, wound infection, nerve damage, and lymphedema (swelling in the arm).

### Sentinel Node Biopsy

The sentinel lymph nodes are the protective nodes that act as the first filters of harmful materials. They are the first lymph nodes to which cancer cells are most likely to spread from a primary tumor.

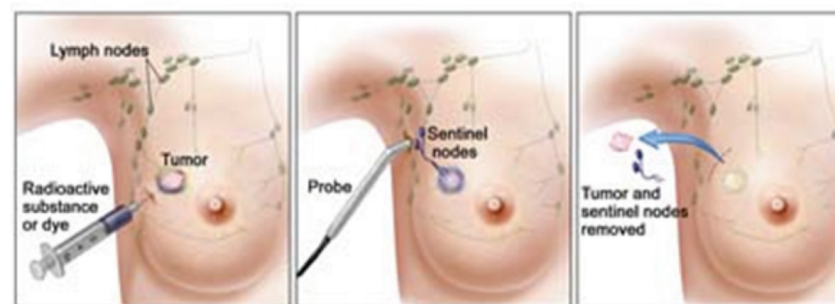
A sentinel lymph node biopsy is a procedure in which the sentinel lymph node is identified, removed, and examined to determine whether cancer cells are present. It is a procedure designed to minimize the risks associated with an axillary lymph node dissection. The surgeon usually removes 1 to 5 lymph nodes from the underarm area and sends those nodes for examination by a pathologist to determine if cancer cells have spread to them:

- A negative sentinel lymph node biopsy result suggests that cancer has not spread to nearby lymph nodes.
- A positive sentinel lymph node biopsy result indicates that cancer may be present in other nearby lymph nodes.
- This information can help a doctor determine the extent of the cancer and make an appropriate treatment plan.

### What happens during a Sentinel Lymph Node Biopsy?

A radioactive substance and/or a blue dye are injected near the tumor or around the nipple area to locate the position of the sentinel lymph node. The radioactive substance will be injected before the surgery while you are awake.

During the operation the surgeon uses a device that detects radioactivity to find the sentinel node or looks for lymph nodes that are stained with the blue dye. Once the sentinel lymph node is located, the surgeon makes a small incision in the overlying skin and removes the node or nodes.



The sentinel node is then checked for the presence of cancer cells by a pathologist. If cancer is found, the surgeon may remove additional lymph nodes, either during the same procedure or during a follow-up surgical procedure. You won't know the exact number of lymph nodes that may have cancer cells until the final pathology is available a few weeks later.

The sentinel node procedure is usually done at the same time that the primary tumor is removed. However, the procedure can also be done as a separate procedure before or after removal of the tumor.

### What are the risks of the procedure?

A sentinel lymph node biopsy may have side effects. Most of the side effects are minor. It is important to tell your doctor if you may be pregnant.

- Radioactive dye - the radioactive dye may be mildly irritating and the injection may be painful. The pain will disappear within a few minutes. The amount of radioactivity is less than a chest X-ray.
- Blue dye - your urine, skin and the whites of the eyes may have a blue tinge for about 48 hours after surgery. You will also have a faint blue mark where the dye is injected; this is completely absorbed by the body usually within a few weeks but may be permanent in some cases.
- Sentinel lymph node removal - after the procedure there may be pain, discomfort, fluid collection (causing a lump), or numbness in the area of the incision. There is also a small risk of infection and bleeding. It is normal to get swelling in the area. If the swelling causes a lot of discomfort or shows signs of infection (redness, severe pain, fever), you may need to consult your doctor. The swelling normally improves over the next 4-6 weeks.

If you have any questions, please speak to your treating physician or health care provider.



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وعادة تتم عملية فحص عينة من الغدة الليمفاوية في نفس وقت إجراء جراحة إزالة الورم الرئيسي إلا أن ذلك يتم بصورة منفصلة عن جراحة إزالة الورم الرئيسي.

### ما مخاطر هذا الإجراء؟

قد توجد بعض التأثيرات الجانبية المصاحبة لعملية فحص عينة من الغدة الليمفاوية ولكن معظم تلك التأثيرات تعتبر طفيفة وبسيطة، ويجب إبلاغ طبيبك المعالج في حال احتمال أن تكوني حاملاً.

- الصبغة المشعة: Radioactive dye - قد يؤدي الحقن بالصبغة المشعة إلى بعض الآلام أو التهيج الموضعي بموضع الحقنة والتي قد تستمر لبضع دقائق أما الإشعاعات الناتجة عن الصبغة فإنها قليلة وأقل من الإشعاعات الناتجة عن فحص الصدر بالأشعة.

- الصبغة الزرقاء: Blue dye - قد يحدث ازرقاق (ميل إلى اللون الأزرق) بالبول أو بالجلد أو ببياض العينين لمدة قد تصل إلى 48 ساعة بعد الجراحة، وقد تترك الحقنة بقعة زرقاء خفيفة بموضع إعطاء الحقنة ولكنها تختفي بعد عدة أسابيع حيث يمتص الجسم اللون الأزرق في معظم الأحوال ولكن قد يستمر اللون الأزرق في بعض الحالات.

- إزالة العقد الليمفاوية- بعد الجراحة قد تشعر ببعض الألم أو عدم الارتياح بموضع الجراحة وقد يحدث انتفاخ أو تجمع أو تورم (ناتج عن تجمع السوائل) وقد يحدث فقدان بالإحساس بموضع العملية الجراحية. وهناك احتمالات بسيطة لحدوث عدوى بموضع العملية الجراحية أو حدوث نزيف، ومن الطبيعي أن يحدث تورم بمنطقة العملية الجراحية وقد يصاحبه بعض الاحمرار أو الآلام أو ارتفاع الحرارة. وعادة يتحسن الانتفاخ أو التورم خلال فترة 4-6 أسابيع بعد إجراء العملية الجراحية وقد لا تحتاج إلى استشارة طبيبك.

وفي حال وجود أي أسئلة أو استفسارات لا تتردد في مناقشتها مع طبيبك أو الفريق المعالج لك.

إن المعلومات الواردة بهذه النشرة تهدف إلى التوعية وليست بأي حال من الأحوال بديلاً عن الرعاية الطبية المتخصصة لأغراض التشخيص أو العلاج، ويجب الرجوع للأطباء المعالجين للاستفسار عن أي أمور إضافية متخصصة ولطلب الاستشارة الطبية المتعلقة بأي مشكلة محددة.

