

## *Sentinel Lymph Node Biopsy*

As we discussed, the majority of endometrial cancers (85%) are completely treated with surgery. However, we offer all of our patients the opportunity to have a lymph node assessment to detect microscopic tumour cells in the lymph nodes so we can offer those patients with lymph node spread chemotherapy and radiation therapy to improve their survival.

The procedure that we prefer to assess the lymph nodes with is the sentinel lymph node mapping where we inject the immunofluorescent dye into the cervix and follow it into the pelvic lymph nodes so that we can identify the first (sentinel) lymph node that it arrives at. Because we know that the lymphatic fluid has an orderly flow through the nodes, if the sentinel node is negative, then all of the downstream lymph nodes must be negative. If the sentinel lymph node is positive, then we know there could be other microscopic tumour cells in other lymph nodes and we should offer you chemotherapy and radiation.

As we discussed the risks of the lymph node assessment are the 2-3% risk of lymphedema (lower limb swelling that may be temporary or permanent and could be on a range of mild to more severe). The converse of this is that 97-98% of patients who have the lymph node mapping don't have any problems.

We need to quote a false negative rate of 2% with the lymph node mapping (i.e. We may say the nodes are normal when they aren't 2% of the time).

We also need to tell you that there is a 15-20% chance that the procedure doesn't work on one or both side of the pelvis.

In this instance, we give you the choice between proceeding to have the uterus assessed for high risk features while you are under anaesthetic and if there are high risk features present, proceeding to a full pelvic lymph node dissection. This carries an increased risk of leg swelling of up to 10-15%.

The alternative to this is that we don't remove any further nodes if the mapping doesn't work, but make decisions for post-operative treatment with chemotherapy and radiation based on the risk factors that can be seen in the tumour inside the uterus. This is also valid practice in some parts of the world, but is slightly less accurate than the lymph node mapping and so may lead to over or under prescription of chemotherapy and radiation therapy. Importantly, removing abnormal lymph nodes doesn't increase survival. It is purely a diagnostic procedure so that we can give chemotherapy and radiation to patients who need it (these treatments do improve survival for women with disease in the lymph nodes).

So, you were going to think about what you would do if the mapping doesn't work and let me know. It is really a question of balancing up how you feel about the risk of lymphedema vs the risk of having a less accurate assessment of your lymph nodes.

I hope this is helpful to you in making this decision.