**Tonny Karlsmark**

In patients with lymphedema, we usually find an increased amount of fluid in the skin. The cause of the formation of edema in the skin is a decreased transport capacity of the lymphatic system. Transport in the lymphatic system is impaired due to lack of lymph vessels, malfunction of lymph valves (seen in primary lymphedema) or lack of regional lymph nodes removed after cancer surgery (as in secondary lymphedema).

As the lymphatic system plays a key role in the initiation of the cutaneous immune responses essential to fight bacterial and viral infections, a defect in the system increases the risk of severe cutaneous infections.

 In the epidermis of the skin, dendritic cells such as the Langerhans cells act as sentinels to the adaptive immune system, examination of the local environment and transport of foreign antigens, and presentation of antigens to responsive T lymphocytes in the regional lymph nodes. In the event of a malfunction of the lymphatic system, there is an increased risk of infections such as cellulitis.

The lecture will try to explain why cellulitis is so common in patients with lymphedema.