什么是淋巴瘤?

淋巴瘤是一组起源于淋巴细胞的恶性肿瘤, 淋巴细胞是 淋巴系统中的一种白细胞。淋巴系统由遍布全身的淋巴 结和淋巴管组成。作为人体免疫系统的重要组成部分,淋 巴系统在抵抗细菌和其它感染及破坏老旧细胞或异常细 胞过程中起作用。

淋巴瘤发生在一些淋巴细胞出现恶性变化和增殖失控时。 这些异常增殖细胞不能保护身体免受感染或其它疾病。 它们过度生长导致淋巴结和其它部位出现瘤块。由于淋 巴组织遍布人体的全身, 因此淋巴瘤几乎可能在任何地 方发生,并影响免疫系统的正常功能。

淋巴瘤大致分为两种类型:霍奇金淋巴瘤(Hodgkin Lymphoma, 简称HL)和非霍奇金淋巴瘤(Non-Hodgkin Lymphoma, 简称NHL)。淋巴瘤可发生在儿童和成人。在 新加坡,非霍奇金淋巴瘤更为普遍,占全部淋巴瘤病例 的90%左右。这两种淋巴瘤在临床表现、转移和对治疗 的反应上也各有不同。

淋巴瘤与已经扩散到淋巴腺的其它癌症有区别。这种情 况属于癌症转移而非淋巴瘤。

您有患病风险吗?

淋巴瘤的产生并没有特定的原因,一些风险因素包括:

- **年龄**。总体而言,年龄增长是罹患淋巴瘤的一大风险因 素。大多数的淋巴瘤病例发生在50岁或以上的人群中。 然而,一些类型的淋巴瘤在年轻人中更为常见。
- 免疫系统缺陷。免疫系统减弱的人,例如接受器官移植 后服用免疫抑制药物或感染人体免疫缺陷病毒(HIV),会 增加罹患淋巴瘤的风险。
- ■某些感染。某些病毒感染,如EB病毒(Epstein-Barr病 毒, 简称EBV)、人类T细胞白血病/淋巴瘤病毒(HTLV-1) 和幽门螺杆菌,会增加发生淋巴瘤的风险。然而,淋巴 瘤不具传染性。
- 以前的放射治疗或化疗经历。

有哪些症状和体征?

淋巴瘤的体征和症状是非特异性的, 在其它较不严重的 疾病中也较常见。淋巴瘤的最常见症状有:

- 颈部、腋下或腹股沟无痛的淋巴结肿大
- 长期反复发烧
- 不明原因的体重减轻
- ■夜间盗汗
- ■食欲不振
- 呼吸困难、咳嗽或胸痛
- 持续疲劳, 缺乏精力
- ■不明原因的皮肤瘙痒或皮疹
- ■腹部疼痛或饱胀感

这些症状经常并非由干淋巴瘤所造成。感染或其它健康 问题也可能导致这些症状。但是,如果这些症状持续两 周以上,应该及时就医。

如何诊断淋巴瘤?

- 身体检查: 医生会检查您的颈部、腋下和腹股沟淋巴结 肿大,以及可能涉及的其它身体部位,包括脾脏和肝脏。
- **血液检查:**检测血液指标如 白细胞及其他细胞数量,以 及乳酸脱氢酶(LDH)等的水 平。某些类型的淋巴瘤能引 起LDH明显增高。
- 骨髓抽吸和活检: 可以进行骨 髓抽吸和活检以观察淋巴瘤 是否已扩散到骨髓。



活检: 淋巴瘤通常需要活检以确定诊断。可以切除整个 淋巴结(切除活检)或仅切除部分淋巴结(切开活检),在 显微镜下检查是否有癌细胞。如果细胞有癌变,则进一 步研究以确认淋巴瘤的亚型。

医生可能进行以下成像检验,以了解患者体内淋巴瘤的 扩散范围:

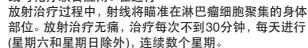
电脑断层(CT)扫描: CT扫描是一种特殊类型的射线检 查,可以生成身体内部的详细图片。医生可以使用CT扫 描检查在腹部、骨盆、胸部、头部和颈部的淋巴瘤细胞。

□ **正电子发射断层(PET)扫描**: 因PET扫描可以分辨肿瘤 细胞的活跃程度, 医生可以进行全身PET扫描寻找淋巴 瘤。PET扫描也能够找到淋巴结外(如皮肤)的淋巴瘤。

如何治疗淋巴瘤?

治疗方法的选择取决于淋巴瘤的类型、淋巴瘤的各种预 后特征和患者的整体健康。治疗可涉及包括、化疗、放射 治疗、生物治疗和干细胞移植在内的任何一种方式。

- · 化疗: 这种疗法涉及使用药物来杀死淋巴瘤细胞。化疗 通常经口、静脉或者脊髓腔给药。根据淋巴瘤的类型,可 以使用单一药物或药物组合。化疗通常按周期给药,周 期和周期之间需要休息一段时间。化学药物的副作用取 决于所用的药物种类和药量。常见的副作用可能是血细 胞计数低、脱发、食欲不振、恶心、呕吐,或口腔和唇 溃疡。请向您的医生咨询能够缓解这些副作用的药物和 治疗方法。
- **放射治疗**: 这种疗法是在肿 瘤局限于特定部位的情况下 射线以杀死淋巴瘤细胞,或 阻断其生长。这种疗法可以 缩小肿瘤,并有助于控制疼 痛。放射治疗可以单独应用 或与化疗联合应用。在进行



- 单克隆抗体: 某些淋巴瘤的靶向治疗使用单克隆抗体特 异性地攻击淋巴瘤细胞上的标靶蛋白,从而杀死淋巴瘤 细胞或阻止它们的生长。单克隆抗体可以在诊所通过静 脉给药。
- ►干细胞移植: 我们身体中有一类存在于血液和骨髓的特 殊细胞称为干细胞,它可以分化成多种功能细胞。在干细 胞移植技术中, 干细胞可从自体采集(自体造血干细胞移 植), 也可从相容供体采集(异体造血干细胞移植)。在移植 之前,给予高剂量化疗和/或放射治疗以破坏骨髓中的 所有淋巴瘤细胞和正常血细胞。在化疗或放疗后不久,干 细胞会被放回患者的血液中。新的干细胞在几周内开始 制造正常血细胞。



Singapore Cancer Society Multi-Service Centre

9 Bishan Place, Junction 8 Office Tower #06-05, Singapore 579837 **(**() 6499 9133 **(**(a) 6499 9140

Location 地点	Bus Numbers 巴士号码
Bishan Bus Interchange	52, 53, 54, 55, 56, 57, 58, 59, 410
In front of Bishan MRT Station	13, 52, 54, 55, 58, 88, 128, 156
Along Bishan St 11	52, 54, 55, 56, 57, 58, 59, 410

- Take Exit A at Bishan MRT Station.
- Walk through Junction 8 Shopping Centre in the direction of the Bus Interchange.
- Without crossing to the bus interchange at the traffic light, turn right and walk along the walkway to locate the Junction 8 Office Tower lobby.
- 在碧山地铁站走向A出口。
- 通过碧山第八站购物中心往巴士转换站方向行走。
- 在红绿灯路口之前右转,沿着走道向前走,就能到达碧山第八站 办公大楼大厅。

Singapore Cancer Society

15 Enggor Street, Realty Centre #04-01, Singapore 079716

- (C) 6221 9578 (E) 6221 9575
- www.singaporecancersociety.org.sg (a) communityhealth@singaporecancersociety.org.sg
- (f) Follow us on Facebook

SCS Rehabilitation Centre @ IEM Office Tower

SCS Satellite Office @ National University Cancer Institute, Singapore SCS Satellite Office @ National Cancer Centre Singapore

LYMPHOMA

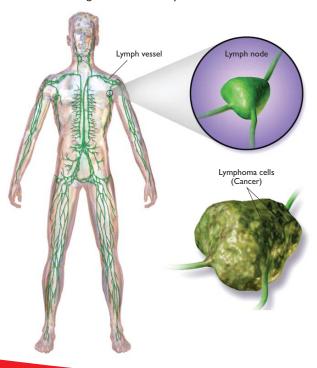
What you need to know about preventing, detecting and treating Lymphoma



What is Lymphoma?

Lymphoma is a general term for a group of cancers that begin in lymphocytes, a type of white blood cells in the lymph system. The lymph system is made up of lymph nodes and thin tubes that run throughout our body. As an important part of our immune system, the lymph system plays a role in fighting bacteria and other infections and destroying old or abnormal cells.

Lymphoma occurs when some lymphocytes undergo malignant change and multiply out of control. The abnormal cells don't protect the body from infections or other diseases. The excessive growth of abnormal lymphocytes results in tumor masses in lymph nodes and other sites. As lymph tissue is found all through the body, lymphoma can begin almost anywhere and affect the normal functioning of the immune system.



Lymphomas are broadly divided into two types: Hodgkin lymphoma (HL) and Non-Hodgkin lymphoma (NHL). These can occur in both children and adults. NHL is more prevalent and constitutes around 90% of all lymphoma cases in Singapore. The two different types of lymphomas behave, spread, and respond to treatment differently.

Lymphoma is to be distinguished from other cancers that have spread to lymph glands. This represents metastases and not lymphoma.

Are You at Risk?

Although there is no specific cause for lymphoma, some risk factors include:

- Age. Getting older is overall a strong risk factor for lymphoma. Most lymphoma cases occur in people in their 50s or older. However, some types of lymphoma are more common in younger people.
- Immune system deficiency. People with weakened immune systems, such as taking immune-suppressant drugs after undergoing organ transplant or being infected by human immunodeficiency virus (HIV), have an increased risk of having lymphoma.
- Certain infections. Infection with certain viruses, such as Epstein-Barr virus (EBV), human T-cell leukemia/lymphoma virus (HTLV-I) and Helicobacter pylori, may raise the risk of developing lymphoma. However, lymphoma is not contagious.
- Previous treatment with radiation or chemotherapy.

What are the Signs and Symptoms?

Signs and symptoms of lymphoma are non-specific and commonly seen in other less serious illnesses. The most common symptoms of lymphoma are:

- neck, underarm, or groin
- Prolonged and recurrent fevers



- Unexplained weight loss
- Drenching night sweats
- Loss of appetite
- Breathlessness, coughing or chest pain
- Persistent tiredness and lack of energy
- Itchy skin without an apparent cause or rash
- Pain or a feeling of fullness in the abdomen

Most often, these symptoms are not due to lymphoma. Infections or other health problems may also cause these symptoms. However, anyone with symptoms that do not go away within two weeks should seek professional medical attention.

How is Lymphoma Diagnosed?

- Physical exam: Your doctor will check for swollen lymph nodes in your neck, underarms and groin, as well as other areas of the body that might be involved, including the spleen and liver.
- **Blood tests:** Blood is taken to check the number of white blood cells, other cells and substances such as lactate dehydrogenase (LDH). Some types of lymphoma may cause a high level of LDH.
- Bone Marrow Aspiration and Biopsy: A bone marrow aspiration and biopsy may be done to see if the lymphoma has spread to the bone marrow.



Biopsy: Biopsy is usually needed to make a definite diagnosis of lymphoma. An entire lymph node (excisional biopsy) or only part of a lymph node (incisional biopsy) may be removed and checked under a microscope to look for cancer cells. If the cells are cancerous, they are further studied to confirm the subtype of lymphoma.

The doctor may do one of the following imaging tests to learn how widespread lymphoma is in the patient's body:

- Computed Tomography (CT) scan: The CT scan is a special type of x-ray test that makes detailed pictures of the body. The doctor may use the CT scan to look for lymphoma in the abdomen, pelvis, chest, head and neck.
- Positron Emission Tomography (PET) scan: The doctor may use the PET scan to look for lymphoma all over the body as it will be able to tell whether a swollen lymph node has increased activity within it. The PET scan may also be able to pick up lymphoma in areas outside the lymph nodes, such as skin.

How is Lymphoma Treated?

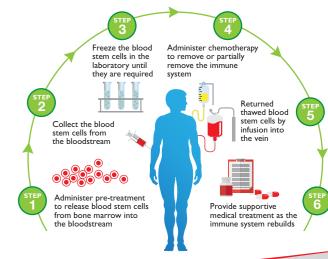
Treatment options depend on the type of lymphoma, various prognostic features of the lymphoma and the overall health of patient. Treatment may involve any of the following modalities, chemotherapy, radiotherapy, biological therapy and stem cell transplant.

- **Chemotherapy:** This involves the use of drugs to kill the lymphoma cells. Chemotherapy is given usually by mouth, through a vein or in the space around the spinal cord. Depending on the type of lymphoma, a single drug or a combination of drugs may be used. Chemotherapy is usually given in cycles, where treatment is followed by a rest period. The side effects of chemo drugs depend on which drugs and how much drugs are administered. Common side effects could be low blood count. hair loss, poor appetite, nausea and vomiting, or mouth and lip sores. Ask your doctor about medicines and treatments that help with these problems.
- **Radiation therapy:** This involves the use of X-rays or other high-energy rays to kill lymphoma cells or block their growth when the disease is confined to a limited area. It can shrink tumors and help control pain. Radiotherapy may be given alone

or in combination with chemotherapy. In radiotherapy, a large machine aims the rays at the part of the body where lymphoma cells have collected. Each treatment is painless and lasts less than 30 minutes each, every day but Saturday and Sunday, for several weeks.

- Monoclonal antibodies: Targeted therapy of certain lymphomas uses monoclonal antibodies, a form of proteins that are designed to attack a specific target on lymphoma cells. Monoclonal antibodies can be administered through the vein at the clinic.
- **Stem cell transplant:** Stem cells are special cells which can be found in the bloodstream and bone marrow. They can differentiate into all the specialized cells. In the stem cell transplant technique, stem cells can be collected from one's own body (Autologous Haematopoietic Stem Cell Transplant) or from a compatible donor (Allogeneic Haematopoietic Stem Cell Transplant). Before the transplant, high-dose chemotherapy and/or radiotherapy is given to destroy all the lymphoma cells and normal blood cells in the bone marrow. Soon after the chemotherapy or radiotherapy, the stem cells are put back into the patient's blood. The new stem cells start to make blood cells within a few weeks.

Autologous Haematopoietic Stem Cell Transplant (AHSCT)





- Painless, swollen lymph nodes in the



The latest Singapore Cancer Registry Annual Registry Report (2010-2014) indicates that lymphoma is the 5th and 6th most common cancer diagnosed among Singaporean men and women respectively.





