Extranodal NK/T-cell lymphoma, nasal type

This page is about extranodal NK/T-cell lymphoma, nasal type – a rare lymphoma associated with Epstein-Barr virus (EBV) infection. It usually develops in the nose.

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What is extranodal NK/T-cell lymphoma?

Extranodal NK/T-cell lymphoma, nasal type, is a rare fast-growing (high-grade) non-Hodgkin lymphoma that grows outside the lymphatic system (‘extranodal’), usually in the nose (‘nasal’). It can develop from two different kinds of lymphocyte (white blood cell):

- **natural killer (NK) cells**, which usually kill cancer cells or cells that are infected with a virus
- **cytotoxic T cells**, which usually kill cancer cells or cells that are infected with a virus only after they have been tagged by other cells in the immune system.

Who gets extranodal NK/T-cell lymphoma?

Extranodal NK/T-cell lymphoma, nasal type, is very rare in the western world but it is more common in people from Asia, Central America and South America. Only around 20 people are diagnosed with it in the UK each year. It usually develops in people around 50 to 60 years old. It is more common in men than women.
Extranodal NK/T-cell lymphoma, nasal type, is strongly linked to infection with a virus called Epstein-Barr virus (EBV). EBV is a very common virus that can cause glandular fever. After you’ve been infected with it, EBV stays in your body but it is normally kept under control by your immune system. If it is not kept under control, it can sometimes cause genetic changes in your lymphocytes that might turn into lymphoma.

Most people who have EBV infection do not develop lymphoma. Scientists don’t know why a few people who have EBV go on to develop extranodal NK/T-cell lymphoma.

Symptoms of extranodal NK/T-cell lymphoma

People who have extranodal NK/T-cell lymphoma, nasal type, usually develop a fast-growing lump inside their nose or in the sinuses (air-filled spaces) around the nose. You might have symptoms that affect your nose, eyes or face, such as:

- a blocked nose
- nosebleeds
- swelling of your face
- weepy eyes.

The lymphoma can become very large and might grow into your mouth, throat and eye sockets. It can sometimes spread to your lymph nodes, skin, testicles or gut.

It is also common to have general symptoms, such as:

- swollen lymph nodes
- fever, night sweats and weight loss (‘B symptoms’)
- fatigue.

If the lymphoma affects your skin, you might have a rash or raised, red lumps that can break down (ulcerate) and scab over.

Extranodal NK/T-cell lymphoma, nasal type, is usually diagnosed when it is at an early stage (stage 1E or 2E). If it develops outside the nose, it is often more advanced when it is diagnosed (stage 3 or 4).
Treatment of extranodal NK/T-cell lymphoma

Extranodal NK/T-cell lymphoma, nasal type, is rare. This makes it difficult to determine which treatment gives the best outcome. Clinical trials in this disease are unusual because it is such a rare condition, particularly in the western world. Several targeted drugs are being tested in clinical trials worldwide.

For localised NK/T cell lymphoma of the nose, radiotherapy is an important treatment. You have it as part of your initial treatment, usually with chemotherapy. You might have your course of chemotherapy at the same time as you are having radiotherapy or after your radiotherapy.

If your lymphoma is more advanced (stage 3 or 4), you are likely to have chemotherapy without radiotherapy.

Chemotherapy used to treat extranodal NK/T-cell lymphoma, nasal type, includes regimens (combinations of drugs) such as:

- SMILE: dexamethasone (a steroid), methotrexate, ifosfamide, L-asparaginase and etoposide
- AspaMetDex: L-asparaginase, methotrexate and dexamethasone.

However, your medical team might recommend a different chemotherapy regimen. If you are not fit enough to have standard chemotherapy, you might be treated with radiotherapy on its own, lower doses of chemotherapy, or L-asparaginase on its own.

If you have advanced lymphoma, you respond to chemotherapy and you are well enough, your doctor might recommend that you have a self (autologous) stem cell transplant. This might give you a better chance of staying in remission (no evidence of lymphoma).

Relapsed or refractory extranodal NK/T-cell lymphoma

Extranodal NK/T-cell lymphoma, nasal type, is a very aggressive form of lymphoma. It is common for it to come back (relapse) after treatment. Sometimes, extranodal NK/T-cell lymphoma, nasal type, doesn’t respond to treatment (refractory lymphoma).
In these cases, your doctor might consider:

- a **targeted drug**, usually through a clinical trial
- a different chemotherapy regimen – examples include GELOX (gemcitabine, L-asparaginase and oxaliplatin) but your doctor might suggest another regimen
- a **donor (allogeneic) stem cell transplant** if your lymphoma responds to more chemotherapy and you are well enough.

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**Research and targeted treatments**

Many new treatments are being tested to see if they can help people with T-cell lymphoma. Drugs that are being tested in extranodal NK/T-cell lymphoma, nasal type, include:

- **antibody treatments** such as alemtuzumab, siplizumab and bevacizumab
- **antibody–drug conjugates** such as **brentuximab vedotin**
- **cell signal blockers** such as alisertib
- **proteasome inhibitors** such as bortezomib
- **HDAC inhibitors** such as romidepsin or belinostat
- a chemotherapy drug called **pralatrexate**.

Some of these might be available to you through a clinical trial. If you are interested in taking part in a clinical trial, ask your doctor if there is a trial that might be suitable for you. To find out more about clinical trials or search for a trial that might be suitable for you, visit **Lymphoma TrialsLink**.

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We have separate information about the topics in **bold font**. Please get in touch if you’d like to request copies or if you would like further information about any aspect of lymphoma. Phone 0808 808 5555 or email **information@lymphoma-action.org.uk**.

**References**

The full list of references for this page is available on our website. Alternatively, email **publications@lymphoma-action.org.uk** or call 01296 619409 if you would like a copy.
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