Adult T-cell leukaemia/lymphoma (ATLL) is a potentially aggressive type of mature T-cell non-Hodgkin lymphoma. It is linked to the viral infection, HTLV-1 (human T-cell lymphotropic virus 1).

ATLL is rare in places such as North America and Australia, but more prevalent in countries such as Japan, China, the Caribbean, South and Central America and West Africa, where infection with HTLV-1 is more common. ATLL, cancerous T-cells are found in the peripheral circulating blood (leukaemia) or in the lymph nodes (lymphoma) or in both. There are four subtypes of ATLL: acute; lymphomatous; chronic; and smouldering.

How does Adult T-cell lymphoma affect the body?
Symptoms of ATLL will vary, depending on the subtype. In acute ATLL symptoms develop rapidly and include fatigue, skin rash and enlarged lymph nodes in the neck, armpit and groin. A high calcium level in the blood (hypercalcaemia) may also be present which can cause a confusional state, bone pain and severe constipation. The lymphomatous form of ATLL presents with enlarged lymph nodes. Chronic ATLL is slow growing and frequently characterised by enlarged lymph nodes that can be found anywhere in the body. Skin rash and fatigue are also common symptoms in this form of ATLL. Smouldering ATLL develops slowly and presents with very mild symptoms such as a few lesions on the skin. Patients with the chronic or smouldering types of ATLL can progress to the acute form in about 25% of cases.

Who does Adult T-cell lymphoma commonly affect?
ATLL occurs in 2%-5% of people who are infected with the HTLV-1 virus. Currently, doctors are unable to determine which of those people infected with HTLV-1 will develop ATLL. It is slightly more common in men than in women, and can occur from young adulthood to old age.

Do we know what causes Adult T-cell lymphoma?
The HTLV-1 virus is a retrovirus, and is in the same class of virus as the HIV/AIDS virus. It is believed that the HTLV-1 virus is transmitted through sexual contact, exposure to contaminated blood and breastfeeding, and is a key factor in the development of this rare lymphoma.

How is Adult T-cell lymphoma treated?
The first line treatment for ATLL depends on the subtype. It can range from monitoring without treatment in the smouldering type, to a combination of therapies for the acute and lymphomatous types. Therapies include antiviral drugs, such as acyclovir and interferon together with chemotherapy regimens such as: CHOP (cyclophosphamide, doxorubicin, vincristine and prednisolone) or EPOCH (etoposide, vincristine, doxorubicin, cyclophosphamide and prednisolone). Some patients may undergo a bone marrow transplant if they go into remission from their initial treatment. Relapsed ATLL is usually treated with chemotherapy regimens such as: GND (gemcitabine, vinorelbine and doxorubicin); ICE (ifosfamide, carboplatin and etoposide); and DHAP (dexamethasone, cytarabine and cisplatin).

The Leukaemia Foundation publishes the guides: 'Understanding Non-Hodgkin Lymphoma. A guide for patients & families'; 'Understanding Autologous Transplants' and 'Understanding Allogeneic Transplants'.

For more information, freecall 1800 620 420
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