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Funding medical research into this Silent Killer

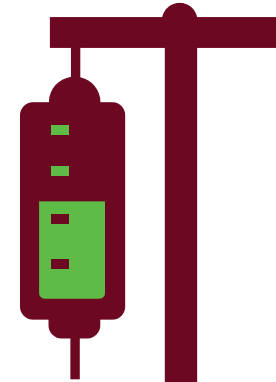
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X-Linked Lymphoproliferative Syndrome

Update on management and outcome of XLP1



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A new study published in 2011 has shed light on the management and outcome for boys with XLP1.

Our understanding of the survival of boys with XLP is based on information collected over 15 years ago, before we could diagnose XLP accurately using genetic techniques and more importantly before better treatments for the symptoms of XLP were available. Over the last couple of years we have collected information from 91 patients from 64 families around the world to help us understand how patients present with their disease and what happens to boys once they are diagnosed. We only included information on patients who had their XLP diagnosis confirmed by genetic testing.

Improved survival rates.

Similar to previous reports we found no relationship between a patients' genetic make up and their symptoms. In fact, within the same family we saw different symptoms and many patients had one symptom to begin with then developed other ones too. A symptom called HLH (haemophagocytic lymphohistiocytosis) and severe glandular fever were the commonest ways for boys with XLP to present (40% of cases) and still the most devastating. HLH occurs when the immune system becomes overactive and certain immune cells called histiocytes multiply and cause inflammation and organ damage. Over half of all XLP patients had problems with recurrent infections and antibody levels (dysgammaglobulinaemia) at some point in their illness. Nearly a quarter of boys suffered from lymphoma and survival after lymphoma had improved from 65% to 92%. We also found that more patients were being diagnosed through family history than before. EBV is often associated with triggering symptoms in XLP patients and we found that 65% of people had EBV at diagnosis but this did not affect their outcome. This is important because although XLP has always been strongly associated with EBV, this study shows that this is not always the case. Overall survival for boys with XLP has significantly improved from 25% in previous reports to 71% in this series.

Stem cell transplants—effects of complications & survival rates.

HLH is a very serious problem in XLP and from our data we found that patients who received a stem cell transplant after HLH had a 50%

chance of surviving, but patients who didn't have a transplant only had an 18% chance of surviving. We looked at patients who had a stem cell transplant between 1997 and 2009 and overall their survival was 81%. We looked at many different factors we thought might influence the outcome of transplant such as conditioning regime and the type of donor but the only thing we found that significantly affected the outcome was having HLH before transplant. We did not see many complications of transplant; half of those who received a transplant got graft versus host disease but for most of them it was mild and did not last long.

63% of patients who did not have a stem cell transplant survived but those that presented with HLH did much worse with only 18% surviving. 70% of these untransplanted patients receive replacement immunoglobulin and not many had complications from their disease.

Summary.

So, the survival for boys with XLP has really improved. It is still very difficult to decide whether someone should have a stem cell transplant or not as we cannot predict who will get HLH, the most lethal symptom of XLP. We have found that survival after transplant is really good but we have also found that patients with HLH do very badly if they do not have a transplant. Every case and family is different so we cannot say what will work best for everyone but on the whole we would recommend that all patients with HLH have a transplant. It is more difficult to weigh up the risks and benefits for patients with other symptoms but it is very important that all patients are monitored closely for any changes in their disease.

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