**The Function of HLA in the minimization of GVHD**

GVHD is a term used to refer to a medical condition that occurs after tissue from a donor is transplanted into the body of a genetically different patient. The graft’s immune cells identify the recipient as foreign, after which they commence an attack on the recipient’s body tissues. The complication is normally entails the transplantation of stem cells, but can also include other types of tissues as well (Chen et al., 2016).

 There exist two types of GVHD, which are categorized based on the extent of the reactions, and the tissues that have been affected. The acute type, also known as a-GHVD, is always witnessed in the course of 100 days following the transplant, and is an issue of concern due to the associated death rates caused. The other type is the Chronic form, also called c-GVHD, and normally happens after the first 100 days. The condition may either be intense or moderate, and determines the individual’s health in the long term.

The condition is mainly treated by glucocorticoids for both the acute and chronic versions. The medication is administered through the use of intravenous means, and work by suppressing the immune action of the T-cells on the tissues of the patient. However, lowering the immunity to very low levels may bring a risk of cancer or other ailments to the body of the host. Hence, the drugs are administered in lower doses so that the mild appearance of the condition may be acceptable. A recently approved drug called “ibrutinib” is currently being used to replace the other medications (Simon, Mccullough, Snyder, Solheim & Strauss, 2016).

Several antigens may be responsible for the initiation of the condition, and these include the HLA. Matching of the HLA therefore plays an important role in ensuring that GVHD is minimized after performing transplantation. The tissue from the patient is matched with that of the donor using DNA analysis.

**References**

Chen, Xinhua et al. "Cytokine and Human Leukocyte Antigen (HLA) Profile for Graft-Versus-Host Disease (GVHD) After Organ Transplantation." *European Journal of Medical Research* 21.1 (2016): n. page. Web. 19 Nov. 2017.

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