

Gig case study

Business



List the different mucilaginous types and explain where they are found and what their functions are. IGMP - found on B cell surfaces and functions as antigen receptor Gig - also found on a-cell surfaces and functions as antigen receptor Gig - antibodies that are secreted across mucus layer to prevent microbes from penetrating cell bodies leg - defend body from parasites and binds to allergens to initiate destruction.

Gig - functions in neutralizing, opposition, compliment activation, antibody dependent cell-mediated society, neonatal immunity, and feedback inhibition of a-cells and found in the blood. Looking over this list, do Daniels recurrent lung infections make sense? Why? Yes because he is lacking these antibodies to protect his body from these reoccurring lung infections. What is an antigen? A foreign object that induces an immune response in the body.

What is mucilaginous isotope switching? It is a biological mechanism that changes a a-cell's production of mucilaginous or antibodies from one class to another.

How does the failure of immunological isotope witching explain the lack of Gig, Gig, and leg in Daniels blood? Since IGMP and lag are the most prevalent, there aren't enough of other antibodies to undergo isotope switching. Is this the only explanation for the lack of Gig, Gig, and leg in Daniels blood? No. NH do you think the doctor suspected the need for genetic testing? There could be genome defects that is causing something in the immune system no to produce these antibodies or the cells. What is the role of a genetic counselor? O closely look at Daniels genes and see if this immunodeficiency has been passed own from the parents. Draw out the

family pedigree that the counselor is presenting and show how this X-linked genetic disorder has passed through Suntan's family tree.

NH is the genetic counselor suggesting genetic testing for Suntan's sisters? Because the disorder is X-linked, which means Daniel inherited from his mother. If the genetic counselor examines the genes of her sisters she could possibly find out if they carry the disorder as well. Which cells have the CD, aligned? Which cells have the CD, receptor?

T-cells have the CD aligned and a-cells carry CD receptor on their respective surfaces. What does their interaction cause? How does this explain Daniel's immunological deficiency? Their interaction creates the signal transduction that is needed for mucilaginous isotope switching which explains his immunological deficiency. Since this event does not happen he lacks the antibodies necessary to tag NT these intentions. What is mucilaginous therapy? It is when antigens from a donor are injected into the bloodstream.

Why will Daniel need a transfusion every three to four weeks?

Because white blood cells in his body do not last very long because they will be constantly used up fighting his already present infections and because his body does not create these antibodies he will need these transfusions to place them back into his body. Why do you think it will not lower his IgM levels? It will lower because with increased antibodies present in his bloodstream they will constantly bind to the receptor that triggers IgM antibody production.

How can a bone marrow or cord blood stem cell transplant cure Daniel? The cells that Daniel needs for isotope switching are produced in the bone marrow.

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If he gets the transplant that cause increase the chances for him to produce these cells needed. What is HAL? NH is a matched sibling the best possible donor? It stands for Human Leukocyte Antigen and it is the major histiography's complex.

A matched sibling could decrease the chances for the body to fight off the foreign bone marrow. What is prenatal testing? It is the testing of disease in an embryo or fetus before it is born. How would Susan and Joe be able to select a child with matching HAL? They would have to do prenatal testing of embryos in order to get that matching HAL.