

Type: Case Study

Subject: Advanced Physiology and Pathophysiology

Subject area: Nursing

Education Level: Undergraduate/College

Length: 3 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

Title: Case Study Analysis

Instructions: develop a 1- to 2-page case study analysis in which you: explain why you think the patient presented the symptoms described. identify the genes that may be associated with the development of the disease. explain the process of immunosuppression and the effect it has on body systems. i need an introduction page, maybe half a page. then i need a summary page another half a page. (this would make one page total, making the entire assignment 3pages). need to use scholarly references from reputable institutions. approved ones: agency for healthcare research and quality centers for disease control and prevention national guideline clearinghouse u.s. preventive task force national institutes of health

Kidney Transplant Failure

Student Name

Institutional Affiliation

Kidney Transplant Failure

Transplant is considered the only remaining therapy for individuals with end-stage organs' failure. However, they can exhibit acute transplantation days to weeks after the operation. The body's immune system starts to recognize the donated organ as a foreign object the attacks it. The attack can lead to kidney destruction and finally rejection. Nonetheless, allografts rejection can be prevented through the cross-matching of serum and matching human leukocyte antigen

(HLA). Immunosuppressive drugs such as azathioprine can also be used in lowering the cases of acute kidney rejection.

The Reasons why the Hispanic-American Presented the Above Signs

The Genes Associated with the Development of Acute Kidney Rejection

Most kidney rejection cases in the body are triggered by IMS1 gene locus. Genomic incompatibilities between the recipients and donors also cause allo-sensitization. The allo-sensitization mainly occurs against the new antigens. Besides, the recessive inheritances in gene-disrupting variants also increase the chances of allograft rejection. LIMS1 gene locus is too associated with the encoding of minor histo-compatibility antigens.

The Process of Immuno-Suppression and Its Effects on The Body Systems

Immunosuppression is the process through which the immune system is reduced from self-activation. The immune system has some portions with immunosuppressive effects on other body parts. Immunosuppression can be induced using drugs with varying mechanisms of actions. The induction prepares the bone marrow to deter organs' transplant rejection. Fusarium subglutinans is one of the commonly used drugs in preventing the allograft rejection among the transplant patients.

Immunosuppression often starts with induction therapy that involves the use of multiple drugs with different reactions in the body. Immunosuppression therapy uses high dosages of antibody agents to avoid rejection of transplanted organs in the body. Besides, immunosuppression can involve the use of advanced doses of drugs such as cyclosporine (Neoral), Tacrolimus (Prograf), as well as Imuran (Azathioprine).

Maintenance is the next step after induction in the immunosuppression process. At this stage, the caregivers ensure that they closely supervise the patients to observe whether there are any indications of side-effects due to the high drugs' dosages used. If the patients show vital signs such as weight gain, high blood pressure, fever, as well as high temperatures. Such signs are associated with acute rejection of a transplanted kidney.