Module 1 Assignment: Case Study Analysis

An understanding of cells and cell behavior is a critically important component of disease diagnosis and treatment. But some diseases can be complex in nature, with a variety of factors and circumstances impacting their emergence and severity.

Effective disease analysis often requires an understanding that goes beyond isolated cell behavior. Genes, the environments in which cell processes operate, the impact of patient characteristics, and racial and ethnic variables all can have an important impact.



*Photo Credit: Getty Images/Hero Images*

An understanding of the signals and symptoms of alterations in cellular processes is a critical step in the diagnosis and treatment of many diseases. For APRNs, this understanding can also help educate patients and guide them through their treatment plans.

In this Assignment, you examine a case study and analyze the symptoms presented. You identify cell, gene, and/or process elements that may be factors in the diagnosis, and you explain the implications to patient health.

**To prepare:**

By Day 1 of this week, you will be assigned to a specific case study for this Case Study Assignment. Please see the “Course Announcements” section of the classroom for your assignment from your Instructor.

The Assignment (1- to 2-page case study analysis)

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.

**Case Study Analysis:**

A 34-year-old Hispanic-American male with end-stage renal disease received kidney transplant from a cadaver donor, as no one in his family was a good match. His post-operative course was uneventful, and he was discharged with the antirejection drugs Tacrolimus (Prograf), Cyclosporine (Neoral), and Imuran (Azathioprine). He did well for 3 months and had returned to his job as a policeman. Six months after his transplant, he began to gain weight, had decreased urine output, was very fatigued, and began to run temperatures up to 101˚F. He was evaluated by his nephrologist, who diagnosed acute kidney transplant rejection.

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·         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.