BroadcastMed | Graft vs. Host Disease (GVHD) - Mayo Clinic

Hello, my name is Dr. Shahrukh Hashmi. I'm a consultant here at the Mayo Clinic Transplant Center, And also the Director of the Long-Term Follow Up Clinic here within the Blood and Marrow Transplant Division.

Graft vs. host disease is a rare disease, It happens as a complication of bone marrow transplantation, which is equivalent to stem cell transplantation. What happens is that the immune cells of the donor, they recognize your body as the foreign tissue or foreign organ, and they reject your body.

What causes this? What are the risk factors? It's very complicated. Briefly, few risk factors we recognize include a gender mismatch.

For example, if the donor is a female and the patient is male, that can cause an increased risk of graft vs. host disease. And then certain genetic matches which are important for transplant, if they're not perfect, they can cause graft vs. host disease as well.

There are different types of graft vs. host disease with different presentations. There's the acute graft vs. host disease, which happens within a few months of transplant. There's a chronic graft vs. host disease that happens after a few months of transplant. And it can happen after one year, or even two years of transplant.

And then there is a new category, called Overlap Type of graft vs. host disease, which has features of both acute and chronic graft vs. host disease. The acute graft vs. host Disease, which can happen within a few days, a few weeks, or within, for example, three to four months of transplant usually presents with involvement of the skin, the GI tract, or the liver.

Now, the chronic graft vs. host disease is a unique disease that happens as a late complication of transplant and resembles a disease known as lupus. It can affect any organ system. For example, it can affect the eyes.

Patients can have very dry eyes, which can lead to blindness. It can affect the mouth, causing dry mouth, difficulty swallowing. It can affect the GI tract, to cause persistent nausea, vomiting, diarrhea.

It can affect the liver. It can cause scarring in the liver. It can affect the skin sometimes, which can cause shiny skin or plaques on the skin, sometimes the joints.

Now, it's important to differentiate between different types of graft vs.host disease, since the treatments are slightly different. Both acute and chronic graft vs. host disease are very hard to treat. Once they become severe, treatments don't work.

We have been doing stem cell transplants for the past 50 years. And yet, we don't have a single medication approved in the United States for the treatment of graft vs. host disease. Corticosteroids, for example, prednisone, still remain the backbone of the treatment of graft vs. host disease, both acute and chronic.

With 450 transplants a year at the Mayo Clinic Rochester area alone, we are a big group of BMT physicians, with at least 16 physicians dedicated to inpatient and outpatient management of transplant patients. Here at the Mayo Clinic, we have clinical studies for both acute and chronic graft vs. host disease.

We have a dedicated clinic, which is responsible for the management, recognition, of graft vs. host disease and its complications. We generally see the patients within two to six months of a transplant. We hope that with this organized clinic we are able to prevent the complications of stem cell transplantation. We're able to detect the graft vs. host disease early, in different organ systems, and treat it properly so that the patient's survival is better. And also equally important, the quality of life improves.