Graft-versus-host Disease*

Causes

GVHD may occur after a bone marrow or stem cell transplant in which someone receives bone marrow tissue or cells from a donor (called an allogeneic transplant). The new, transplanted cells regard the recipient's body as foreign. When this happens, the newly transplanted cells attack the recipient's body.

GVHD does not occur when someone receives his or her own cells during a transplant (called an autologous transplant).

Before a transplant, tissue and cells from possible donors are checked to see how closely they match the person having the transplant. GVHD is less likely to occur, or symptoms will be milder, when the match is close.

The chance of GVHD is:

- Very low when a person receives bone marrow or cells from an identical twin
- Around 30 - 40% when the donor and recipient are related
- Around 60 - 80% when the donor and recipient are not related

Symptoms

There are two types of GVHD: acute and chronic. Symptoms in both acute and chronic GVHD range from mild to severe.

Acute GVHD usually happens within the first 3 months after a transplant. Common acute symptoms include:

- Abdominal pain or cramps, nausea, vomiting, and diarrhea
- Dry or irritated eyes
- Jaundice (yellow coloring of the skin or eyes)
- Skin rash, itching, redness on areas of the skin

Chronic GVHD usually starts more than 3 months after a transplant, and can last a lifetime. Chronic symptoms may include:

- Dry eyes or vision changes
- Dry mouth, white patches inside the mouth, and sensitivity to spicy foods
- Fatigue, muscle weakness, and chronic pain
- Skin rash with raised, discolored areas, as well as skin tightening or thickening
- Shortness of breath
- Vaginal dryness
- Weight loss

Exams and Tests

Several lab and imaging tests can be done to diagnose and monitor problems caused by GVHD.

A biopsy of the skin, mucus membranes in the mouth, or other parts of the body may help confirm the diagnosis.
Treatment

After a transplant, the recipient usually takes drugs that suppress the immune system. This helps reduce the chances (or severity) of GVHD.

A number of medicines and other treatments are often started after the transplant. You will continue taking the medicines until your health care provider thinks the risk of GVHD is low. Many of these medicines have side effects, including kidney and liver damage.

You will have tests to watch for these problems on a regular basis.

Treatment of chronic GVHD includes prednisone (a steroid), or the same drugs that suppress the immune system.