

## Rejection

Transplant rejection is a natural process involving a patient's own immune system. The job of the immune system is to protect us from things that may be harmful such as germs, cancer cells and other foreign cells - such as those coming from a transplanted organ. When the body knows the cells from the transplanted organ, are foreign or different, it starts a process to attack the cells – a process called organ or graft rejection. This is an expected part of transplantation and is treated with different medicines.

There are a number of anti-rejection medicines to help fight against graft rejection. Since each transplant patient responds differently to the process of rejection and medicine, the transplant team orders a blend of medicines that works best for each individual patient.

### **There are different types of rejection:**

- Acute rejection happens most often in the first weeks to months after transplant, but can occur at any time. It is a process involving inflammation or irritation of the liver cells and is treated with steroids and changes in the anti-rejection medicines.
- Chronic rejection is a process where the body's immune system slowly attacks and slowly destroys the cells. It is not a process involving inflammation and cannot be treated with steroids. Chronic rejection may continue for months to years. It occurs in about 10% of post liver-transplant patients. In some cases it can be improved with a change in medicines.

A small percent of patients who have chronic rejection, over time, may need another transplant.

Most patients do not experience any physical signs or symptoms of rejection. Some patients may have flu-like symptoms – chills, fever and body aches. The most common way to find out about rejection is through lab work and a liver biopsy. An increase of the liver function tests tells us something is bothering the liver. This might be a virus, medicine, rejection or lab error. If the liver function tests are higher, the first step is to repeat the lab work. If the liver function tests remain high, a liver biopsy and/or radiology test (like an ultrasound) will be ordered to try to resolve the problem.

### **Summary:**

- Rejection is a common problem called a complication of the transplant. This can occur at any time.
- Anti-rejection medicines should be taken as instructed to avoid rejection. If doses of medicine are routinely missed, this will cause rejection.
- If you are having trouble taking or getting your medicines, call the transplant office.
- You play the most important part in your health care plan – stay calm, stay healthy and keep in close contact with the transplant team.