

# PROCEDURE: LEUKOCYTAPHERESIS

(ALSO REFERRED TO AS LEUKOPHERESIS OR WHITE BLOOD CELL DEPLETION)

## Description:

White blood cells normally fight infection. Certain diseases, like leukemia, can cause very high numbers of white blood cells in the blood. If these extra cells are not removed, the blood can become thick and cause problems.

## Reason for the Procedure:

Leukocytapheresis is used to remove the extra white blood cells and prevent complications such as bleeding in the brain, shortness of breath and other problems.

## Venous Access:

In some cases, leukocytapheresis can be done using needles that are placed in each arm. Blood is removed from one arm, the white blood cells are removed, and the rest of the blood is returned to the patient through the other arm. In patients with small or fragile peripheral veins, the placement of a central venous catheter may be necessary.

## Duration:

The length of the procedure depends on how many white blood cells need to be removed. A typical procedure takes 2-3 hours.

## Risks and Side Effects:

This is a safe procedure but side effects can occur. Common side effects include fatigue, nausea, dizziness, feeling cold, tingling around the mouth, tingling fingers, and decreased blood pressure. Serious side effects like seizures or abnormal heart beat are very rare. It is very important to tell medical staff if these symptoms occur.

## Number of Procedures that are Required:

Many patients only need one treatment, but depending on the number of white blood cells, more than one treatment may be needed.

## Diseases for Which the Procedure is Used:

This procedure is used for blood disorders with very high numbers of white blood cells, including acute lymphoblastic leukemia and acute myelogenous leukemia.

## Other Considerations:

This procedure may decrease the number of blood platelets. For those patients who already have a decreased number of platelets, the doctor will want to carefully monitor your blood counts while you are receiving treatment; therefore, further lab tests may be needed.

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