

# Nephrologists 2020: Plasma exchange TR: implementation experience in the CHU Ibn Rushd Casablanca

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## Introduction:

After decades of use, plasma exchanges appear as an important therapeutic advance for certain serious diseases inadequately controlled by conventional treatments. This technique consists of a subtraction of a large plasma volume to remove the body of pathogenic molecules and to restore the blood elements; the extracted plasma volume is replaced by a substitute liquids of varying composition as indicated or centers. Plasma exchange otherwise called plasmapheresis, is an approach to "clean" your blood. It works similar to kidney dialysis. During the treatment, plasma - the fluid piece of your blood - gets supplanted with plasma from a contributor or with a plasma substitute. Individuals with certain types of various sclerosis use plasma trade to oversee unexpected, serious assaults, once in a while called backslides or flare-ups. Their plasma could have certain proteins that are assaulting their own body. At the point when you take out the plasma, you dispose of those proteins, and manifestations may show signs of improvement. During plasma trade, your circulatory strain is lower than expected. This can cause you to feel powerless, bleary eyed, or queasy. Drink loads of water in the days prior to your treatment, since that can help forestall these side effects. You may feel tired after plasma trade, however a great many people can return to their ordinary exercises immediately. Plasma exchange can cause draining and hypersensitive responses, and it can make your opportunity of getting a disease higher. In uncommon cases, blood coagulation could frame in the machine. Therapeutic plasma exchange expels huge sub-atomic weight substances, for example, unsafe antibodies from the plasma. It is generally done utilizing a mechanized platelet separator to guarantee liquid adjust and keep up an ordinary plasma volume. This may require the inclusion of a femoral or jugular line to permit satisfactory blood stream. Regularly, 30–40 mL/kg of plasma (1–1.5 plasma volumes) are expelled at every methodology and supplanted with isotonic 4.5 or 5.0% human egg whites arrangement (a few administrations substitute 25–half of supplanting volume with 0.9% saline). Trade with new solidified plasma (FFP) is held for the substitution of ADAMTS13 in thrombotic thrombocytopenic purpura (see underneath) or to supplant thickening components. A one plasma volume trade evacuates about 66% of an intravascular constituent and a two plasma volume trade roughly 85%. TPE is regularly joined with illness adjusting treatment, for example, immunosuppressive medications, for the fundamental condition.

The objective of this work is to review the theoretical and practical modalities of the technique, indications and contraindications and different complications of EP

## Materials and methods:

This is a retrospective, observational extending over a period of 24 mois. Notre study included renal transplant patients, hospitalized in the Nephrology Department of the University Hospital IBN ROCHD and in whom an indication for EP was detention.

## Results:

4 renal transplant recipients who received EP during the study, with an average age of 34.1 and extremes of 21 and 54; sex ratio at 1 (two women and two men). The indication in 4 patients had acute humoral rejection; 4 grafted received a total of 35 sessions of PE, the total plasma volume traded during the 35 sessions is \$ 122.71, the alternative solution was the combination of albumin and plasma frozen spawning. The EP was associated with immunosuppressive therapy type CTC INC + in two cases and CTC + MMF + ICN ° in both cases one case presented complications.

## Discussion:

This therapy has grown in recent years thanks to a better control of extracorporeal circulation problems in the performance of cell separators accessibility semi-industrial blood products, a better understanding of the pathophysiology of number of affection including in the field of immunology.

## Conclusion:

Plasma exchange is a non-selective apheresis technique that can be performed by filtration or centrifugation allowing rapid treatment of high molecular weight pathogens. Immunosuppressive therapy is usually associated to reduce the rebound effect of the purified substance.