



## **ILumens Protocol**

# MANAGEMENT OF A TRANSFUSIONAL INCIDENT BY BACTERIAL CONTAMINATION OF LABILED BLOOD PRODUCTS

The transfusion event results in the occurrence of adverse effects in a recipient of LAS (Red Blood Cells), Platelet Concentrates (CP) and / or Fresh Frozen Plasma.

Infectious side effects have been caused by bacterial contamination.

The causes are diverse:

- At the time of the donor's collection (contamination of the sampling equipment, insufficiency in aseptic measurements, transient bacteraemia of the donor, etc.);
- When handling the PSL;
- In case of breakage of the cold chain;
- In case of poor storage conditions of PSL;
- In case of bad defrosting of PFCs;
- In case of defective pockets.

### **Initial evaluation**

The transfusion incident must be evoked in the presence of one of these criteria within 90 minutes after the start of the transfusion:

- Temperature> 39 ° C or increase of basal temperature by 2 ° C
- Chills,
- Tachycardia> 120 / min or increase in basal heart rate> 40 / min
- Increase or decrease in systolic blood pressure> 30 mm Hg

A state of shock can occur at the same time, it associates:

- A tachycardia, Oliguria,
- Hypotension, mottling,
- A polypnea, dyspnea, Hyper or hypothermia,
- Digestive signs: nausea, vomiting, diarrhoea,
- Pain: vertebral, abdominal, thoracic,...



#### **CONDUCT TO BE CAREFUL IMMEDIATE BY THE CAREGIVER**

- IMMEDIATE STOP OF THE TRANSFUSION, but keep the venous approach by changing the tubing with an isotonic solute.
- Keep the PSL bag with the tubing involved. Isolate them in an airtight bag and store them at
- + 4 ° C until they are sent to the laboratory for analysis of the incriminated product according to the procedure validated by the correspondent hemovigilance of the establishment.
- Doctor's call.
- Information of hemovigilance correspondents to block blood products from the same donation.
- Scoped patient: vital parameters measured every 5 minutes (pulse, blood pressure, oxygen saturation and respiratory rate).
- Temperature monitoring.
- Evaluation of the state of consciousness of the patient,
- Evaluation of the patient's pain (EVA),
- Verification of the permeability of the infusion,

The caregiver should note all the vital parameters in order to transmit the information to the doctor.

#### Medical intervention

In front of one of the criteria mentioned above, the medical staff must call on the doctor.

The doctor will then prescribe:

- Blood cultures: two to one hour apart.
- Probabilistic antibiotic therapy.
- Treatment of the state of shock.

#### **Nurse supervision**

It is recommended:

- √ Monitor vital parameters continuously;
- √ Record vital parameters on the monitoring sheet every 10 minutes;
- √ Monitor body temperature on a regular basis;
- √ Note the presence of chills on the monitoring sheet;
- ✓ Monitor the permeability of the venous route.

