

## Transfusion in Portugal

Fátima Nascimento, MD

Over the last 30 years transfusion practice has undergone significant progress. However, although opinion makers have enforced individual governments as well as the European Union as a whole to take measures for improvement of the quality and safety of blood and blood components, not so much has yet been done regarding the quality and safety of their use.

The inclusion of near miss events in the haemovigilance system (HvS) and the extension of this system over the clinical stage has facilitated the monitoring and improvement of the clinical setting of the blood transfusion chain. In Portugal, the notification to the HvS is mandatory only for the EU requirements and voluntary for all types and severity of adverse reactions and events. After the implementation of HvS as a national system, the errors and near miss events referring to the whole transfusion chain (from donor to recipient) have also been included. All the notifications to the HvS are performed through a website that is now complete although it had taken two years for the structure to be fully implemented. Online notification facilitates prompt transfusion-risk assessment at a national level. The major conclusion to be drawn from such transfusion-risk assessment is that in Portugal misidentification of the patient during pre-transfusion sample collection or just before transfusion seems to be the main cause of adverse events and reactions. If undetected, these misidentifications may result in acute hemolytic reactions that need to be promptly and correctly recognized and treated in order to avoid fatal consequences.

Although much has already been done in this respect there is still room for improvement regarding the clinical part of transfusion chain. The development and publication of national “standards for clinical guidance” which refer to decision-making in transfusion are a starting point for clinical audits to be performed in the near future.

The articles in this issue of the JTM quarterly present alternatives to blood components as well

as strategies to reduce the use of allogeneic blood and to correct nutritional deficiencies. The use of Erythropoietic Stimulating Agents has been referred to. The understanding of the haemostatic system has also been subjected to major revision, and therapeutic choices in massive haemorrhage are now being shifted to specific plasma derivatives.

The worldwide economic crisis has forced individual countries to seek measures for reduction of blood transfusion costs. Portugal is no exception and the process of modification of the structure and policies in the transfusion field has already been started. To face this economic challenge there is an ongoing consolidation of the Blood Transfusion System Organisation in Portugal. In order to secure self-sufficiency in blood and blood components the Blood Centres have become merged with Transplantation Centres and the consolidation process is dynamic. Blood Donation Sites have been established in hospitals and they are closely linked to the Blood Centres. Up to date self-sufficiency in plasma derivatives has not yet been achieved but we expect to succeed in this respect through the call-for-tender procedure.

Transfusion Medicine Services (TMS), as we call the Hospital Blood Banks, are now clearly dedicated to support the transfusion practices, nevertheless blood transfusion cost represents an important quota of hospital budgets. An attempt to estimate such costs is also forwarded in this issue of the Journal.

In conclusion, it may be said that transfusion service in Portugal has undergone satisfactory evolution: quality systems have been implemented in all Blood Centres and in almost all Transfusion Medicine Services; some hospitals of excellence introduce new therapies based on blood components; virus inactivation technology is applied to plasma and platelets/platelet concentrates while molecular biology technique is also in place for some aspects of immune haematology. Some of these subjects will be further presented and discussed in this Journal.