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EDITORIAL

Present and future of European neonatology

Focus on Patent Ductus Arteriosus

VASSILIOS FANOS & HERCÍLIA GUIMARÃES

We are very proud to present to you the Proceedings of the 5th International workshop on neonatology – Present and Future of European Neonatology, to be held in Cagliari (Italy), 29–31 October 2009, which follows the successful previous editions, on the behalf of many Scientific Societies and the President of the Italian Republic.

The Proceedings of the last edition were published on *Journal of Chemotherapy*.

We are grateful to the Editors of *Journal and Maternal Foetal and Neonatal Medicine* for hosting us in this edition.

The Meeting, this year, is organized with the Union of European Neonatal and Perinatal Societies (UENPS). The aim is to discuss the current issues and to bring ourselves an update on the latest in research and clinical neonatology, with special reference on the European newborns.

The main topic of the Workshop is Patent Ductus Arteriosus (PDA). PDA is a common cause of morbidity and mortality among very low birth weight infants and must be treated in an individual basis. Non steroid anti-inflammatory drugs are commonly used in the treatment of PDA. However we have more questions than answers concerning the use of NSAIDs in neonatology. In fact we currently use the same dosage of these drugs for newborns with different gestational ages and postnatal ages, a paradox by a pharmacokinetic and pharmacodynamic point of view. Moreover the presence of 2 enantiomers and finally the genetic polymorphism resulting in extensive and poor metabolizers must be taken into account. Interesting results have been proposed to individualize in a tailored way the dosage in the first week of life, with the therapeutic drug



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monitoring and for the evaluation of the efficacy/safety relationship with urinary biomarkers, such as prostaglandins E₂, and metabolomics.

Moreover, no common approach is available in Europe. In this supplement we present the data

obtained with a questionnaire filled by 45 NICUs from 19 European countries. There is a wide variation among NICUs and countries, regarding the use of NSAIDs to treat PDA: type of drug, way of administration, number of courses, prophylactic use, timing of surgical intervention. No general guidelines are followed. In one out of five NICUs choices are influenced by economical reasons. Benefits and limitations of the therapeutic closure of the ductus arteriosus must be well balanced by neonatologists.

Thus, recommendations are necessary to standardize the treatment of PDA in Europe, in order to give to all newborns identical health care opportunities. Some of the most important world wide researchers are the speakers of this argument. Other important issues of the workshop cover new developments in neonatology (what's new in different fields), neonatal infectiology (old and new problems), and laboratory medicine (biomarkers from research to clinical practice). The Proceedings could be helpful for neonatologists, pediatricians, obstetricians, perinatologists, pediatric cardiologists, ultrasonographers, fellows, students, midwives, nurses, and all those who are interested in the newborn infant. As members of the Union of European Neonatal and Perinatal Societies, we have a common dream, that is to achieve a global management of the newborn, step by step, and to accomplish the right of the newborn to receive the best healthcare independently from the birthplace. We believe that this workshop may be a small step to improve the health assistance of European newborns and to give them the neonatology of the future from today.

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