Dear Sir,

I read with interest the recent and extraordinary article by Surmeli-Onay et al., describing a case of nonimmune hydrops fetalis (NIHF) due to prenatal onset of Niemann-Pick Type C Disease (OMIM 257219). NIHF is a severe and challenging foetal condition usually defined as an excessive fluid accumulation within the foetal extravascular compartments and body cavities, presenting with generalized skin thickness of >5 mm, placental enlargement, pericardial or pleural effusion, or ascites. Hydrops fetalis is not a diagnosis in itself but rather a symptom, and the end-stage of a wide variety of disorders. The article is important because it describes the association of NIHF and lysosomal storage disease (LSD) that is often missed during the diagnostic work-up of NIHF. The exact incidence of NIHF (thus excluding the cases of Rhesus isoimmunization) is estimated at 1 case in 2000-3000 pregnancies. The incidence of inborn errors of metabolism, including LSD, in the diagnosis of NIHF varies from a minimum of 1% up to 18%, obtained in 13 different studies (references from the Author on request). The broad differences among these 13 different studies might be explained by the fact that some of them presented, in my opinion, a sort of bias. These data were obtained exclusively from published papers, including single case reports like the article by Surmeli-Onay et al. As already suggested, the incidence of LSD is probably higher than the reported 1%, but it is most likely much lower than the unlikely figure of 18%. The highest reported incidence could be due to a bias linked to the involvement of specialized centres for metabolic diseases. However, more generally, it has to be underlined that many cases of NIHF are only partially investigated, thus obtaining very low incidences of LSD. Finally, over the last few years greater attention has been paid to the relationship between LSD and NIHF; thus, older reviews or large series studies may have underestimated the true incidence of LSD. I agree with the author’s conclusions that identifying index cases is essential. In an effort to diagnose an ever greater number of NIHF idiopathic cases, two articles suggested the use of specifically designed protocols to diagnose NIHF during the prenatal and neonatal period, and to diagnose LSD in NIHF, respectively.

References


Carlo Bellini
Neonatal Intensive Care Unit, Department of Pediatrics, University of Genoa, I.R.C.C.S. Gaslini Institute, Genoa, Italy

E-mail address: carlobellini@ospedale-gaslini.ge.it