A RARE CASE OF MATERNAL IGG TYPE ANTI M INDUCED HYDROPS FETALIS

S Kumarage¹, A Manthrirathna², J Wickramarachchi³, D Munasinghe⁴

¹Blood Bank, ²Department of Paediatrics, ³Department of Obstetrics and Gynaecology, ⁴Department of Radiology, Army Hospital, Colombo, Sri Lanka ¹samanthakumarage@yahoo.com

MNS system was the second blood group system discovered in 1927. This blood group system is second only to the Rh blood group system in its complexity. Our patient with one live child presented herself to clinic for her 5th pregnancy. Her past obstetric history indicated that she is B Rh negative M negative and her husband is O Rh positive M positive. Due to previous exposure to M antigen during previous pregnancies she developed IgG anti M which is very rare (MNS blood group system usually produces IgM antibodies). Antibody screening was performed and planned to repeat at 28th week of pregnancy. Ultrasound scan to be performed in every two weeks and the middle cerebral artery systolic velocity was recorded to assess the foetal anaemia. Her condition was discussed in the multidisciplinary team and proposed to initiate intrauterine blood transfusion when and where necessary. Intrauterine death of the foetus was observed at the 24th week of the pregnancy with features of hydrops foetalis. IgG anti M antibody is capable of destroying the red blood cells of the foetus in early life. Therapeutic plasma exchange is the only option to reduce the antibody concentration, but the literature suggested that it is of limited success.

Keywords: MNS blood group system, IgG anti M, Middle cerebral artery systolic velocity, Therapeutic plasma exchange