SYMPOSIUM 7
NEONATOLOGY: AN UPDATE FOR OTHER SUBSPECIALISTS
S7.1
WHAT IS NEW REGARDING NEONATAL JAUNDICE?
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Classically we have always tried to find one cause for a patient with multiple symptoms. In the era of genetics we have come to realise that often one symptom is only manifested if a variety of causative factors are present, often an interplay of genetic predisposition and environmental factors.

We have classically attributed neonatal jaundice to one cause (e.g. G6PD deficiency) for an individual patient. Current research data however suggest multiple risk factors interact to determine whether or not a child gets jaundice. Neonates with G6PD and jaundice were shown to have only mild haemolysis, not more severe than babies with G6PD deficiency and no jaundice. This suggested that haemolysis by itself is not the determining factor whether a patient with G6PD deficiency gets jaundice or not. Important determinants of neonatal jaundice in these patients may be the existence of concomitant risk factors in the same patients. It is estimated that more than 20% of Malay neonates carry at least one mutation in the UGT1A1 gene which encodes the enzyme for the rate limiting step in bilirubin excretion. About 2-5% of patients have Southeast Asian ovalocytosis. Twenty five percent of patients have ABO blood group incompatibility. Over 2% of patients have Diego blood group incompatibility. Next to these, there are a variety of less well studied genetic risk factors for neonatal jaundice that could occur in a significant frequency as well. Add to this, the relative high prevalence of environmental risk factors for neonatal jaundice and it will be soon apparent that many of our neonates have multiple risk factors for neonatal jaundice, which may be a main determinant of whether jaundice occurs or not.

Neonatal jaundice has most likely a multi-factorial aetiology. Most children with neonatal jaundice may have a combination of risk factors rather than 1 single cause.