

### **Case 1.**

A mother has been admitted to a local maternity unit in preterm labour at 24<sup>+3</sup> weeks of gestation. The singleton male fetus is very small with an estimated weight of 450 grams. The mother has not yet received antenatal steroids. The on-call paediatric team is asked to provide counselling and attend the birth. As per the Framework, the first step is to assess the risk for the baby if delivery occurs. At a gestation of 24<sup>+3</sup> weeks, the average survival rate for liveborn babies in the UK (if active treatment is provided) would be approximately 60%, with a 1 in 7 risk of severe impairment among survivors. However, in this case, the very low birth weight for the gestational age in a male fetus increases the risk. It is difficult to quantify this risk, but the baby's prognosis is worse than average for 24 weeks of gestation, and within the "high" risk category. Given the risk for the infant, counselling should, if possible, be provided by an experienced senior trainee or consultant neonatologist in conjunction with the obstetric team. If possible, this counselling should take place after the local team has discussed the case with the nearest NICU. It would be appropriate to provide active obstetric and neonatal management if that were desired by the parents. However, it would also be appropriate to provide palliative care, if that was felt by the parents to be in the baby's best interests.

In this case, the parents decide after consultation that they wish the baby to receive palliative (comfort focused) care. Labour progresses and a live-born baby is delivered weighing 460 grams. He is bruised and floppy with a heart rate of 50 beats per minute. The paediatric team attend to support provision of palliative care. The baby is wrapped and given to his parents to hold. He dies at approximately 30 minutes of age.

### **Case 2.**

A mother presents to her local maternity unit (SCBU) at 22<sup>+0</sup> weeks of gestation with bulging membranes and active preterm labour. No antenatal steroids have been given, and the estimated weight of the male fetus is 510g. There is an extremely high risk of poor outcome for this fetus if delivery occurs within a short period of time. The mother and her partner are informed of the likely outcome, and advised that active (survival focused) management is not considered to be appropriate. The mother receives palliative obstetric management, and the infant is stillborn.

### **Case 3.**

A mother presents in preterm labour to a level 2 centre at 22<sup>+3</sup> weeks of gestation. The fetus was conceived by IVF and gestation is certain. The fetus is female and has an estimated fetal weight of 480 grams. The mother has not yet received antenatal steroids. The paediatric team is asked to provide counselling and attend the birth. Risk assessment in this case indicates that if birth occurs imminently, there would be an extremely high risk of the baby dying or of surviving with severe impairment. If labour progresses, it would be usual to provide palliative care at birth. The neonatal team may attend the birth to provide support for palliative care, but not to provide resuscitation. However, there are potentially modifiable risk factors in this case. In the absence of evidence of chorioamnionitis, it may be possible to delay preterm birth with tocolysis and so, if the parents desire, an active approach to management, antenatal transfer and corticosteroids could be provided.

Two days later, at 22<sup>+5</sup> weeks, following transfer to a maternity unit co-located with NICU and administration of steroids, labour progresses. Given the advance in gestation, availability of specialised neonatal intensive care, and anticipated effect of corticosteroids, the baby's risk is now

judged to fall in the “high” category. Accordingly, after further consultation with parents, it would be appropriate to provide active management if this is what parents wish.

In this case, the parents decide that they wish the baby to receive active neonatal care, magnesium sulphate is given, and a live baby is born weighing 490 grams. The baby is intubated, receives surfactant and is transferred to neonatal intensive care.