that treatment of the presenting life threatening event takes precedence over such disadvantages. Albumin is also used before exchange transfusion to enhance bilirubin removal but the evidence for this is debated.6 This means of treatment was employed extensively in the era of Rh haemolytic disease but is now much less often used.

**RESPIRATORY DISTRESS SYNDROME**

The facts that infants with respiratory distress syndrome are oedematous and have low serum albumin concentrations led to the idea that replacement may confer benefits. Greenough et al most recently expressed this possibility and showed that infusions caused a diuresis and weight loss in sick infants.7 However, such studies really only support the contention that infants with respiratory distress syndrome are hypovolaemic and therefore suffer from underperfusion. What is unclear is whether this matters or not. Perhaps a more interesting line of study would be to look at the effects of plasma expansion early in postnatal life—there were studies in the late 1960s suggesting that umbilical cord oedema and serum albumin concentrations could be used as markers for the development of respiratory distress syndrome. What would happen now if we were to expand the circulating volume in the first few minutes of extraterine life and then follow up with modern intensive care methods? It is unlikely that albumin will be curative but it might shorten or reduce the requirement for intensive care.

**Conclusion**

The use of these substances in neonatal care is widespread but poorly studied. This is unfortunate as any means of treatment must be formally assessed to ensure that it is properly used and maximum benefit obtained. Formal studies should be undertaken in order to achieve this goal.

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SURF 4 trials*, studies of this size have become feasible. In both these surfactant trials, a common 'core database' of descriptive variables and essential outcome measures (including those just described) is routinely collected. If this large collaborative network continued, other important questions could be answered quickly and inexpensively. Perhaps the first step is to agree an agenda of questions to be addressed.17 This might cover several other issues in respiratory management, such as the role of nasal or facemask continuous positive airway pressure before intubation in moderate respiratory disease,18 19 or the optimum range of carbon dioxide or oxygen tension for carbon dioxide or oxygenation, circulation and lung mechanics in newborn infants. Arch Dis Child 1981;56:326-30.


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*Information about the OSIRIS trial can be obtained from Dr Adrian Grant, Director, Perinatal Trials Service, National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford OX2 6HE and about the CORSURF 4 trial from Dr Henry Halliday, Neonatal Unit, Royal Maternity Hospital, Grosvenor Road, Belfast BT12 6BB.