

excluding from consideration the mother treated with glucocorticoids and the patient with prolonged spontaneous membrane rupture (on the grounds that these factors may accelerate fetal lung maturation^{10 11}) the incidence of RDS when PG was absent is increased to nine out of 10 babies, virtually the same as the 93% incidence reported by Kulovich *et al.*⁸

In practical terms an amniotic fluid L/S ratio below 2.0 with no PG therefore indicates the near-certainty of RDS if delivery cannot be postponed; on the other hand, knowledge that PG is present, despite an immature L/S ratio, should encourage immediate delivery of even a very small preterm fetus judged to be at serious risk in utero.

Because of the increased risk of RDS in the babies of diabetic mothers, and particularly its occurrence in them despite satisfactory L/S ratios, it is encouraging that PG was detected in the amniotic fluid of our seven insulin-dependent diabetics and that none of the babies developed RDS, though in all these patients the L/S ratio was also satisfactory. More data are needed to confirm or refute the contention by Cunningham *et al.*⁷ and Kulovich and Gluck⁸ that PG provides a better prediction than does the L/S ratio of the likelihood of RDS even when pregnancy is complicated by diabetes.

These promising preliminary results suggest that the amniotic fluid phospholipid profile (especially PG) should be substituted for use of the L/S ratio alone. In practice this would be simpler and more efficient than first measuring the L/S ratio by uni-dimensional thin-layer chromatography and then, if the ratio was less than the established critical value, going on to determine the phospholipid profile by a two-dimensional technique. In addition to more data on the overall predictive accuracy of the amniotic fluid phospholipid profile there is a special need for information on its value, including possibly the use of other components as well as PG, in the presence of such complications as maternal diabetes and when the amniotic fluid is obtained from the vagina after spontaneous premature rupture of the membranes.

With reference to the last point, our data are already of some value. Because of contamination by cervical or vaginal discharge,⁵ or because unpredictable changes may occur in the L/S ratio after membrane rupture,¹² the L/S ratio of amniotic fluid collected vaginally may give an unreliable assessment of fetal lung maturation. Although the concentration of PG in the amniotic fluid may also alter once the membranes are ruptured,¹³ our results (RDS in only one of 69 babies when PG was present in samples from the vagina, but in each of seven babies when it was absent) support the contention that it is simply the presence

of this compound, rather than its concentration, that confirms safely mature fetal lungs. Confirmation of these findings in a larger series would have practical value for management of the often very difficult problem of spontaneous premature membrane rupture. The obstetrician would be able to identify and expedite delivery of the baby with already mature lungs, thereby reducing the risk of infection in utero; on the other hand, with an unsatisfactory phospholipid profile the risk of infection would be accepted and more time allowed for continued lung maturation, this process being monitored in further samples of amniotic fluid obtained per vaginam or, if that is not possible, perhaps by amniocentesis.

References

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ONE HUNDRED YEARS AGO A typical example of what may be properly described as the way in which coroners' inquests ought not to be held, occurs casually this week in the papers, among the reports of the inquests of Mr W Carter. Deceased was a person named Bolfield; and, among the evidence given, was that of two women in the house, the landlady and the lodger, who stated that the deceased had gone up to bed at nine o'clock, that he was of drunken habits, and sometimes had severe falls when intoxicated. He was found dead in his room next day. The expert evidence called was that of the coroner's beadle, who appeared on this occasion, as is often the case in the present absurd and irregular state of coroners' inquests, and announced that "he had had the body laid out, and found nothing to indicate the cause of death; the face and hands were contracted, the hands being clenched." In answer to a question from the coroner, this worthy judicial expert stated that, in his opinion, the deceased had had a fit of apoplexy, while asleep in a state of drunkenness. Comment upon evidence so utterly worthless, and upon conclusions so ludicrously devoid of any substantial basis, would be out of place, of course. The verdict was "Death from natural causes, brought on by a fit, caused by drunken habits." But, inasmuch as there was no evidence that there had been a fit, and no evidence of death being caused by a fit, and such a death might just as easily have been caused by strychnine-poisoning, or from strangulation—might just as easily have been violent as natural, it is evident that such a mode of holding inquests is much

more likely, in any given case, to conceal crime than to discover causes of death. Of course, we do not imply that the cause of death in this case was anything but natural; but, if there were, it would remain perfectly undiscovered, so far as any means were taken by this mock inquest to discover it. Such a mode of holding medico-legal inquests is a scandal to a civilised country. For two successive years, a measure has been introduced by Government to amend the law in respect to coroners' inquests; and the frequency with which we have of late had to comment on the lamentable carelessness and ignorance in the holding of coroners' inquests, and the course of procedure at these inquiries, indicates the desirability of bringing such a legislative measure into action. (*British Medical Journal*, 1881.)

Correction

Beta₂-microglobulinaemia: a sensitive index of diminishing renal function in diabetics

We regret that an error occurred in this paper by Dr G C Viberti and others (10 January, p 95). The first line of the results section should have read: "All diabetics had been selected because they had positive Albustix tests. . . ."