

## Modern management of cases with premature rupture of membranes

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Premature rupture of the membranes is a complication that must be taken seriously, mainly because of the danger of ascending infection. Most obstetricians tend to induce labor at 37 weeks of gestation or more after the membranes have ruptured prematurely; however there are controversial opinions about what to do when the membranes rupture before 37 weeks of gestation. On the one hand a prolongation of the pregnancy is indicated because of fetal immaturity and on the other hand the infant morbidity and mortality rate rises without any active treatment due to infection with increasing latency between rupture of membranes and the birth.

These difficulties are the main points of controversial discussions which have been going on for decades about the clinical procedure after premature rupture of membranes and premature infant. Some estimate the risk of prematurity as more serious and therefore favour waiting (6,7,10); others consider the risk of infection as more important, and therefore take an active course (1, 2,3, 5,8,9).

The opinions from which gestational age onwards the prematurity risk is lower than the risks caused by ascending infection are different; they range from 33 weeks as published by Berkowitz and coworkers (1) and Miller and coworkers both in 1978 (9), to 37 weeks of gestation as published by Günther and Kunze 1976 (4) and Karpj and coworkers 1979 (7).

We shall certainly hear about these questions in more detail during the course of our panel. Some of the reasons why opinions vary, may from our point of view be due to the following factors:

- 1) the infection spectra have changed over the years;
- 2) the infection spectra in clinics are not identical;
- 3) the infection propagation conditions in clinics are different.

If one only considers these factors, it is clear that different results can be expected from all the clinical procedures recommended up to now. So from this panel we cannot expect to elaborate patent recommendations for every situation; but we do want to attempt giving information about the possibilities and new measures available today for reducing the dangers of ascending

infection.

### References

1. BERKOWITZ, R.L., R.D. KANTOR, G.J. BECK, J.B. WARSHAW: The relationship between premature rupture of the membranes and the respiratory distress syndrome. Amer.J.Obstet.Gynec. 131 (1978) 503
2. BREESE, M.W.: Spontaneous premature rupture of the membranes. Amer.J.Obstet.Gynec. 81 (1961) 1086
3. CHRISTENSEN, K.K., P. CHRISTENSEN, I. INGEMARSSON, P. MARDH, E. NORDENFELT, T. RIPA, T. SOLUM, N. SVENNINGSSEN: A study of complications in preterm deliveries after prolonged premature rupture of the membranes. Obstet. and Gynec. 48 (1976) 670
4. GÜNTHER, H., M. KUNZE: Vorzeitiger Blasensprung und Frühgeburt. Zbl.Gynäk. 98 (1976) 1383
5. GUNN, G.C., D.R. MISHALL, D.G. MORTON: Premature rupture of the fetal membranes. Amer.J.Obstet. Gynec. 106 (1970) 469
6. GYSLER, R.: Der vorzeitige Blasensprung. Zbl. Gynäk. 100 (1978) 1162
7. KARPY, K.A., C.L. CENTRULO, R.A. KNUPPEL, C.J. INGARDIA, J.C. SCERBO, G.W. MITCHELL: Premature rupture of the membranes: a conservative approach. Amer.J.Obstet.Gynec. 134 (1979) 655
8. LANIER, I.R.jr., R.W. SCARBOROUGH, D.W.FILLINGRIM, R.E. BAKER: Incidence of maternal and fetal complications associated with rupture of the membranes before onset of labor. Amer.J.Obstet.Gynec. 93 (1965) 398
9. MILLER, J.M., M.J. PUPKIN, C. CRENSHAW: Premature labor and premature rupture of the membranes. Amer.J.Obstet.Gynec. 132 (1978) 1
10. SACKS, M., R.H. BAKER: Spontaneous premature rupture of the membranes. Amer.J.Obstet.Gynec. 91 (1967) 888

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