

Definitions

PROM - *Premature Rupture of the Membranes*
(before active phase of labour)

pPROM - *Preterm Premature Rupture of the Membranes*
(before active phase of labour in preterm pregnancy)

Epidemiology

- - *2-3% of all pregnancies*
- - *30% of preterm pregnancies*

Epidemiology (2)

■ Frequency of pPROM (*)

■ <u>Author</u>	<u>Age-grp/weight</u>	<u>pPROM</u>	<u>Year/Country</u>
■ Veber	> 32 weeks	2	1989 - London
■ Veber	28 - 31 weeks	28	1989 - London
■ Veber	< 28 weeks	33	1989 - London
■ Tejani	< 2.500 gr	17	1988 - California
■ Tejani	< 2.500 gr	29	1988 - California

■ * In both studies, more than 6.000 cases were surveyed.

Etiology

■ **Risk factors:**

- - *Infection*
- - *Cervical Incompetence*
- - *Cervical Invasive Procedures*
- - *Low Placenta*
- - *Smoking*

■ **Protection**

- - *pH of the vagina*
- - *Cervical mucus*
- - *Cervical Competence*

Diagnosis

- *Amniorrhoea*
- *Lanugo (1929)*
- *Vaginal pH (1933)*
- *Fetal fact cells (1942)*
- *Arborisation (1944)*
- *Ultrasound*

Management (1)

- **GA**
 - - *Expectant*
 - - *Active - Aggressive*
- **Self - healing (10%)**

Management (2)

- **20-24 weeks**
 - - *Interruption*
- **24-26 weeks**
 - - *Active, checking infection*
- **26-30 weeks**
 - - *Expectancy*
 - - *Antibiotics*
 - - *Steroids*
- **30-36 weeks**
 - - *Aggressive*
 - - *Steroids and Interruption*

Treatment

- *Antibiotics*
- *Steroids*
- *Tocolysis*

Antibiotics

- *Prophylactic - Lab results - Bacteriostatic*
- *Therapeutic - Immediately - Bactericidal*

Steroids

- *RDS (1972)*
- *Long-term neonatal complications*
- *Risk of infection*
- *Best results: first dose (1-7 days)*

Tocolysis

- *Pro- and contradictory*
 - - *24 hour steroid treatment*
 - - *In utero transfer*

Fetal wellbeing

- *Amniocentesis*
- *BPP (8 - 10) - 24 hours*
- *Quantity of AL*

Clinical Chorioamnionitis

■ The frequency of symptoms associated with IAI

<u>Symptoms</u>		<u>Frequency (%)</u>
• Temperature	> 37.8 C	100
• Maternal Heart Rate	> 100 / min	20 - 80
• Foetal Heart Rate	> 169 / min	40 - 70
• White Blood Cells / cc	> 15.000	70 - 90
• White Blood Cells /cc	> 20.000	3 -10
• Odorous AL		5 - 22
• Uterine Tenderness		4 - 25

Neonatal survival

- Neonatal survival rate of pregnancies complicated by pPROM

■ <u>Gestational age (weeks)</u>	<u>Survival rate (%)</u>
■ 24	36
■ 25	55
■ 26	65
■ 27	76
■ 28	85
■ 29	90

- p.s. Surphactant has been used postnatally (Jonathan M, 14)

Interruption of Pregnancy

- ***Risk for infection overcomes prematurity***
 - ***Fetal lung maturation***
 - ***Fetal distress***
 - ***Maternal and/or fetal infection***

Recurrent pPROM

- ***20% Risk***
- ***History***
- ***Hydramnion***
- ***Multifetal Pregnancy***
- ***Recurrent infection***
- ***Smoking***