5. CARE OF WOMEN PRESENTING WITH SUSPECTED PRETERM PRELABOUR RUPTURE OF MEMBRANES FROM 24+0 WEEKS OF GESTATION

Author: Anastasia Noroc

Scientific adviser: Catrinici Rodica, MD, Associate Professor, Discipline of Obstetrics, Gynecology and Human Reproduction, Department of Obstetrics and Gynecology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Preterm Premature Rupture of the Membranes, also known as Preterm Prelabour Rupture of the Membranes (PPROM), is the rupture of the membranes prior to 37 completed weeks of gestation and prior to the onset of labour. PPROM complicates up to 3% of pregnancies and is associated with 30–40% of preterm births. It can result in significant neonatal morbidity and mortality, primarily from prematurity, sepsis, cord prolapse and pulmonary hypoplasia. In addition, there are risks associated with chorioamnionitis and placental abruption.

Aim of study. The diagnosis, assessment, care and timing of birth of women presenting with suspected PPROM from 24+0 to 36+6 weeks of gestation.

Methods and materials. All relevant information was obtained from literature review from the open access databases. The Cochrane Library and electronic databases (DARE, EMBASE, Trip, MEDLINE and PubMed) were searched looking for the following terms in the title or abstract “preterm prelabour rupture of membranes”; “chorioamnionitis”; “intra-amniotic infection”; “IGFBP-1”; “PAMG-1”; “antenatal corticosteroids” and “tocolytics”.

Results. The diagnosis of spontaneous rupture of the membranes is made by maternal history followed by a sterile speculum examination. If, on speculum examination, no amniotic fluid is observed, clinicians should consider performing an insulin-like growth factor-binding protein 1 (IGFBP-1) or placental alpha microglobulin-1 (PAMG-1) test of vaginal fluid to guide further management. Following the diagnosis of PPROM, an antibiotic (preferably erythromycin) should be given for 10 days or until the woman is in established labour (whichever is sooner). Women who have PPROM between 24+0 and 33+6 weeks’ gestation should be offered corticosteroids; steroids can be considered up to 35+6 weeks’ gestation. A combination of clinical assessment, maternal blood tests (C-reactive protein and white cell count) and fetal heart rate should be used to diagnose chorioamnionitis in women with PPROM; these parameters should not be used in isolation. Women whose pregnancy is complicated by PPROM after 24+0 weeks’ gestation and who have no contraindications to continuing the pregnancy should be offered expectant management until 37+0 weeks; timing of birth should be discussed with each woman on an individual basis with careful consideration of patient preference and ongoing clinical assessment. In women who have PPROM and are in established labour or having a planned preterm birth within 24 hours, intravenous magnesium sulfate should be offered between 24+0 and 29+6 weeks of gestation.

Conclusion. In pregnancies following PPROM, women should be cared for by an obstetrician specializing in preterm birth; ideally, this would take place in a dedicated preterm labour clinic. Modifiable risk factors, such as smoking and respiratory diseases should be addressed. There is evidence that screening for lower genital tract infections and midwife continuity throughout antenatal care are beneficial in preventing preterm birth. Clinicians may offer these women genital tract screening for infections and/or serial transvaginal ultrasound scans to determine the cervical length, but the evidence to support these interventions is lacking.