HISTOLOGICAL CHORIOAMNIONITIS IN PRETERM PRELABOUR Rupture of Membranes (PPROM) AT KINGSTON GENERAL HOSPITAL: A PRACTICE AUDIT

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Introduction: Prelabour Rupture of Membranes (PPROM) carries a significant risk of histological chorioamnionitis, which has profound implications on pregnancy outcomes.

Objective: To determine the prevalence of histological chorioamnionitis associated with PPROM in patients following spontaneous onset of labour, urgent delivery or planned delivery after 34 weeks gestation.

Methods: Charts of all patients admitted to Kingston General Hospital with PPROM prior to 34 weeks gestation over five years were collected. Obstetrical outcomes and histopathology reports were reviewed.

Results: 244 patients with PPROM were reviewed. The majority of patients, 169 (69%), went into spontaneous labour and of those, 24 (14%) had clinical chorioamnionitis and 79 (47%) had histological chorioamnionitis. Of the 45 (18%) patients who required urgent delivery, 27 (60%) had clinical chorioamnionitis and 31 (69%) had histological chorioamnionitis. Only 26 (11%) of the original 244 patients with PPROM were managed expectantly until 34 weeks gestation and then had a planned delivery. Of the placentas reviewed, the prevalence of histological chorioamnionitis in this group was 24%. Overall, the clinical suspicion of chorioamnionitis was found to be specific (91%) but not sensitive (37%) for identifying histological chorioamnionitis.

Conclusion: Histological chorioamnionitis complicates almost half of all cases of PPROM that occur prior to 34 weeks gestation. Most patients will progress to spontaneous labour or require urgent delivery for clinical chorioamnionitis or other complications related to ruptured membranes before reaching 34 weeks gestations. Only a subset of patients remain pregnant long enough to be induced, but among those, the prevalence of histological chorioamnionitis is lower, at 24%.