Recent advances in treatment of preterm labour  
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Preterm labour (PTL) is the major cause of perinatal mortality and morbidity. 13 million PTL occurs worldwide in each year. Though PTL means birth before 37 completed weeks but babies born 34 weeks experience most complications. Prevention and treatment of PTL is the important means of reducing adverse events for child. Aetiology of PTL is multifactorial but infection is possible cause up to 40% cases. Preventions of PTL are very difficult but finding predisposing factors and treatment accordingly may reduce its incidence. Avoidance of smoking, heavy work, mental stress are important non-drugs measurement early warnings signs of PTL may help in timings and route of delivery which improves outcome. Pre-pregnancy measure to reduce PTL may be applicable for genital tract anomalies like metroplasty for septated uterus cerclage or cervical incompetence (at 12-14 weeks gestations). But evidence of randomical trial showed that one woman in 30 cases will benefit from cervical suture. If infection is suspected from previous PTL it seems reasonable to take HVS electively at 29-24 weeks gestations.

Outpatients home monitoring of uterine contraction are not feasible. Sonographic evaluation of precocious cervical ripening from 24 weeks gestation has varying support for many years. But biochemical markers of PTL by estimating fetal fibronectin are another promising methods. Treatment needs to be systematic and methodical. Usually it involves assurance, hydration, antibiotic, tocolytics and steroids. Assurance is the key of treatment. It reduces mental stress. These patients should be admitted or referred into hospital where all the neonatal backup services are available. Hydration by parental fluid reduces uterine contraction for a while. Timed delivery in an appropriate set up bring the success.

Tocolytic
Still there is no clear evidence that these drugs improve outcomes following PTL and so it is reasonable not to use them randomly. However, tocolytics drugs should be considered for few days while completion of course of conteco costeroid or in utero transfer of the fetus to a tertiary centre. A wide variety of agents have been advocated to suppress uterine contraction, these are β-agonist like salbutamol, terbutalin, calcium channel blockers (nifidine), indomethacin prostaglandin synthetase inhibitor, magsulphate. Nitric oxide donar and oxytocin receptor antagonist 'atosiban', meta analysis of studies showed that tocolytics reduces the Preterm birth occurring up to seven days after treatment. Ritodren is no longer being used as its severe adverse effect. β-agonists are associated with palpitation, rarely pulmonary oedema. Indomethacin may increase the risk of premature closure of ductus arteriosus, renal, cerebral vasculits and narcotizing colitis. Nifedipine use seems reduces the resin of neonatal respiratory distress syndrome and jaundice. Atosiben has comparatively less adverse effect. Therefore, among tocolytes, Atosifin is preferably. Data of systematic review provide insufficient evidence of any maintenance therapy will prevent PTL.

Antibiotics
Spontaneous PTL is associated with infection and there is good evidence that antibiotics used in women with PROM can delay delivery and reduces feto maternal infections morbidity. In absence of infection, antibiotics has little to do. Preview meta analysis found that antibiotics

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increased the chance of prolong the pregnancy by 7days\textsuperscript{10}. However majority of women will deliver in this time regardless of antibiotics therapy and only 15% of women likely to get benefit from antibiotics. The earlier gestation and having the abnormal genital flora are most likely to benefits from antibiotics. For prophylactic, combination parental oral antibiotics may be necessary on the other hand for therapeutic use intervention antibiotics are most likely to be of greatest benefit. Finally antibiotics should be used only for those women with evidence of infection. Since only in these women are antibiotics likely to be of benefit.

**Corticosteroid**
The benefits of single course of corticosteroids between 28-34 weeks of gestation on respiratory maturation without serious side effect\textsuperscript{11}. Others have done research that consolidated the work\textsuperscript{12}. The timing of therapy in PTL is critical. The best neonatal respiratory results comes after a complete course of two doses of betamethasone 12mg at 24hr apart or 4 doses of dexamathason 6mg at 4 hrs apart. Delivery 3-7 days after this completed course is ideal. Before 24 weeks and after 34 weeks there is little value of steroid. However caution should be used in women who present with membranes reputed for over 24hrs, here the risks of infection are much higher.

For diabetic mother fine-tuning of diabetics control with insulin is necessary\textsuperscript{13}. Multiple pregnancy needs special consideration. Tuberculosis is common in Bangladesh, it itself might mitigate against the use of anti-nettle steroid. Balance against the risk of a flare of TB and RDS is needed. No doubt steroid reduces RDS, intra-ventricular hemorrhage, narcotizing colitis in babies born for PTH, though it can not halt the process of PTL. Long tune side effect of single dose seen minimal. The same cannot be said for repeated doses where a body of observational data is developing which shows no increase protection but detriment to fetal grooms and development. Finally proper timing and appropriate route of delivery of preterm baby in good neonatal backup series bring the desired success.

**References**
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