448 Experience with Perinatal Management of Prolapsed Fetal Membranes under 27 Weeks of Pregnancy by Cervical Cerclage with Bladder Overfilling and Decompression Combined. M.Ochi, K.Isikawa, T.Furui, H.Ito, N.Horibe, S.Miwa, Y.Fujimura, T.Miyazaki, T.Kimura, T.Ishizuka, S.Kazeto, S.Sunouchi, Dept. Obst. and Gynec., The Japanese Red Cross Nagoya First Hosp., Nagoya.

Conservative drug therapy consisting of systemic tocolysis alone was used to treat 14 out of 31 patients whose amniotic membranes had prolapsed through the external as of the cervix into the vagina under 27 weeks of pregnancy, and aggressive surgical therapy consisting of cervical cerclage combined with systemic tocolysis was used to treat the remaining 17 patients. The aggresive surgical therapy consisted of performing double McDonald cervical cerclage after first removing amniotic fluid by amniocentesis and overfilling the bladder (by introducing 500--700ml of physiological saline solution) under general anesthesia. The perinatal results of aggressive surgical therapy were clearly more favorable than the results of conservative drug therapy when compared: prolongation of pregnancy 31.65±36.10 vs 3.50±2.62 days, gestational age at delivery 27.82±4.84 vs 24.12±1.19 weeks, birth weight 1269.37±837.21 vs 690.43±123.72 grams. The prognosis for the newborn infant was also more favorable.

449 Maternal complications, fetal-neonatal prognosis and placental pathology in singleton pregnancy, delivered between 24th - 31st week of gestation. Y.Nitta, K.Kidoguchi, T.Fujita, Y.Wada,* N.Suehara,S.Imai,** M.Nakayama***, Dept. Maternal Medici., Center Institution for Maternal and Child Health, Osaka*, Dept. Obst. and Gynec., Center Institution for Maternal and Children Health, Osaka**, Dept. of Pathology, Center Institution for Maternal and Child Health, Osaka***.

We examined 790 patients who delivered between 24th and 31st week of restation in our hospital. We devided these patients into two groups, IUGR group and non-IUGR group. In IUGR group, the incidence of PIH, fetal distress, IUFD and IVH is significantly higher than those in non-IUGR group. The incidence of pathological findings, such as placental infarction, villar ischemia, intervillar thrombosis, are also significantly higher in IUGR group. Apparent correlationship can be seen between PIH and each pathological findings, between IUFD, IVH and placental infarction. We suggest that utero-placental circulation disorder may play an important role in onset of IUGR, PIH, fetal distress, IUFD and IVH.

450 Clinical Pharmacokinetics of ritodrine hydrochloride following intravenous administration . K.Nakahara, M.Matsuo, K.Ohama, T.Murakami*, A.Fujiwara*,H.Naito**,T.Urabe** Dept.Obst.and Gynec., Hiroshima Univ.Sch.Med., Hiroshima, *Dept. and Obst.and Gynec.,Onomichi Hosp., Hiroshima;**Dept.Obst. and Gynec.,Kure National Hosp.,Hiroshima

The purpose of this study was to simulate ritodrine serum concentration during intravenous infusion using linear pharmacokinetics in pregnant women and to examine the relation between systemic variables and ritodrine concentration . 24 pregnant women diagnosed premature labor received continuous infusion of ritodrine.They were divided into 3 groups, each group was treated with ritodrine infusion, which infusion rate 50μg/min , 100μg/min,150μg/min respectively.Serum concentration was measured by high-performance liquid chromatography with electrochemical detection. In case infusion rate was 50μg/min, steady state concentration was obtained after about 5hrs, the value was 22.9ng/ml. Of the systemic variables monitoring simultaneously,we obtained high correlation between mother heart rate(MHR), mother diastolic blood pressure(MDP),uterine activity(UA), or plasma cAMP level and ritodrine concentration. According to the results we succeeded external cephalic version to 5 pregnant women with breech presentation after 37 gestational weeks following ritodrine infusion 3 hrs continuing.