121 Effect of the maltose-heparin therapy on intrauterine growth retardation in pregnancy induced hypertension. A.Yoshitake*, M.Muraoka*, K.Takagi, M.Nakabayashi, Y.Takeda*, S.Sakamoto. Maternal & Perinatal Ctr., Dept. of OB&GYN*, Tokyo Women's Medical College, Tokyo.

To investigate the effectiveness of the maltose-heparin therapy (MH) on intrauterine growth retardation (IUGR) in pregnancy induced hypertension (PIH), serial ultrasonographic fetal measurements were employed in the cases with IUGR with or without PIH. The diagnostic criteria for IUGR was based upon the fetal trunkal measurements (antero-posterior diameter x transverse trunkal diameter) below 1.5 S.D. of the mean value. The mean gestational age at the diagnosis of IUGR was 27.1+/-2.5 wks in PIH+(n=12) and 33.9+/-0.4 wks in PIH-(n=8). The increment in fetal growth (gram/day), assessed by estimated fetal weight was 21.7 in control group (n=10), 16.2 in PIH+ and 38.1 in PIH-, showing marked improvement in PIH- compared to PIH+($p<0.05$) by MH. Since elevated hematocrit(Ht) is related the pathogenesis of IUGR, all the IUGR cases in this study was divided into high Ht group(Ht$\geq$37;n=8) and low Ht group(Ht<37;n=12). The increment in fetal growth was significantly greater ($p<0.01$) in low Ht (14.0 g/day) compared to high Ht (45.6 g/day). These results indicate the presence of PIH and/or high Ht are the important prognostic factors predicting the effectiveness of MH for IUGR.

122 Effect of low dose aspirin on production of prostaglandins and endotherin, on blood coagulation and hemodynamics in PIH high risk pregnant women. J.Yano, T.Shintani, T.Kira, K.Matsubara, S.Matsuura, H.Kaneko*, Y.Imai*, Dept. OB GYN, Ehime Univ. Sch.Med., Ehime. *Dept. OB GYN, NTT Matsuyama Hosp. Ehime.

To investigate the effect of low dose aspirin on production of prostaglandins and endotherin, on blood coagulation and hemodynamics, sixteen pregnant women (PIH high risk group) in 28-32 weeks of gestation was managed with 81 mg of aspirin for 2-4 weeks. Serum concentration of TXB2 was decreased remarkably under low dose aspirin therapy whereas that of PGI2 did not affected. Serum concentration of endotherin was increased. Pulsatility index of maternal uterine artery, fetal descending aorta and cord artery did not influenced. Maternal systolic, diastoric and mean blood pressures were stable. Bleeding time was prolonged. Platelet agglutinating activity was suppressed whereas other coagulating factors were not affected. No PIH was occured in this group, suggesting that low dose aspirin therapy is effective to prevent PIH.

123 Effect of pregnancy on rat carotid artery response to vasoactive amines. T.Imamura,K.Yamamoto,T.Ikeda,N.Mori, Dept.Obst.and Gynec.,Miyazaki Medical College,Miyazaki.

It has been said that most patients with migraine are relieved from attacks of migraine during the last two trimesters of pregnancy. This fact may indicate that the intra and extracranial artery sensitivity to vasoactive amine is reduced in pregnancy. We investigated the effect of pregnancy on rat carotid artery to norepinephrine and serotonin. The carotid arterial rings prepared from 18 pregnant (20 days) and 18 age-mached nonpregnant rat were stretched in a vessel chamber. The response of the arterial rings to norepinephrine was decreased in the pregnant rat group in comparison with the non-pregnant rat group; pD_2=8.46±0.38, 8.03±0.54, respectively($p<0.02$). While there was no difference in sensitivity to serotonin between two groups. Vascular refractoriness to epinephrine were remained when prostaglandins production was inhibited by indomethacin and the endothelium of the arterial ring was removed. Furthermore, endothelium-derived relaxing factor activity was almost same in both groups. The result that pregnancy decreased the carotid artery response to norepinephrine, regardless of whether the endotherial function was intact or not, may be related to preventive effect of pregnancy against migrainous attack.