

CELLULAR APOPTOSIS DURING PORCINE PLACENTATION

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The purpose of this study was to investigate cellular apoptosis by TUNEL, TEM and the expression of FAS B-10, FAS C-20, FAS ZB4, DR4 and Bcl-2 and Bax; to determine the signalling pathways involved in the remodelling porcine placenta. Histological cuts of porcine placenta of \pm 30, 55, 70, 80 and 114 days of pregnancy were used. The DNA fragmentation was made by TUNEL (ApopTag®). Commercial antibodies were used for the immunohistochemical. The presence of apoptotic cells was observed through the pig pregnancy by TEM. DNA fragmentation *in situ* was observed in placental villi of 30 days of gestation with a staining as patches, whereas in the other gestational periods the labelling was linear. Throughout the gestation the expression of receptor DR4 were negative. At 70 and 80 days the expression of receptors FAS C-20 and FAS ZB4 was abundant. The regulator Bcl-2 in the placental villi was negative through the pregnancy. The Bax protein was found positive at 30 days and at term. At the beginning and at the end of pregnancy the intrinsic pathway would trigger in the porcine placenta apoptosis; whereas in the other gestational periods the remodelling would occur through the pathway of receptors FAS.