

B65 MONOZYGOTIC ORIGIN OF CONJOINED TWINS

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The etiology of conjoined twinning is unknown. But all studies to date have indicated that conjoined twins are of same sex, a finding which represents the strong evidence for their monozygotic derivation.

To confirm the monozygotic origin of conjoined twins, we performed karyotyping and DNA studies in two sets of conjoined twins which the first case was a male epigastric heteropagus and the second was a female thoracopagus. After successful resection of the parasite from the autosite in the heteropagus, the peripheral bloods were obtained from the autosite and his parents. A paraffinized tissue block was obtained from the kidney of the parasite. After successful separation of the thoracopagus, peripheral bloods were sampled from each twin and her parents. The chromosome studies were performed with conventional method. The both twins of two sets had identical, normal karyotyping. Discrimination of zygoty was not possible from the chromosome study. In order to investigate zygoty, DNA analyses were carried out using PCR technique. Total genomic DNA were prepared from the leukocytes and renal tissue. Haplotyping of each conjoined twins and their parents were performed for microsatellites on chromosome 13(Rb1.20) and chromosome 21(D21S11). The results of haplotyping for Rb1.20 and D21S11 locus revealed that two sets of conjoined twins had monozygotic origins.

B66 CREATION OF A MODEL OF BLADDER EXSTROPHY IN THE FETAL LAMB

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The exstrophy/epispadia complex is an infraumbilical defect with the bladder's internal surface exposed to the outside environment and its margins contiguous with the abdominal wall. Surgical treatment of this disease has improved much in the recent years. While some bladders subsequently grow after newborn closure, others do not. These different outcomes have lead us to investigate this disease with animal model.

We chose the fetal lamb because its length of gestation (150days). In addition, its size is large enough to make surgical manipulation. Fourteen of the 40 fetal lambs used in this experiment were in control group. Bladder exstrophy were created surgically in 26 fetal lambs at the gestation age of 70-80 days. Then, the gestation was continued to term. Most lambs with bladder exstrophy had live births. We can try various methods of treatment and study the pathogenesis of exstrophy using this animal model.