Outcome of 555 Consecutive Transabdominal Chorionic Villus Samplings in a Teaching Hospital

Tze Kin LAU MD, MRCOG Associate Professor
Mo Ching Macy CHAU NM Nurse Specialist
Tak Yeung LEUNG MBChB, MRCOG Senior Medical Officer
Man Wah Selina PANG MBChB, MRCOG Medical Officer
Tak Yuen FUNG MBBS, MRCOG Consultant*
Tse Ngong LEUNG MBChB, MRCOG Associate Professor
Department of Obstetrics and Gynaecology, Prince of Wales Hospital, The Chinese University of Hong Kong
*Department of Obstetrics and Gynaecology, Alice Ho Miu Ling Nethersole Hospital

The objective of this study was to review the outcome of 555 consecutive transabdominal chorionic villus samplings (CVS) for prenatal chromosomal or genetic studies. All procedures were performed by trained operators under continuous ultrasound guidance. The commonest indications for the procedure were advanced maternal age (91.7%), previous history of chromosomal abnormalities (3.8%) and thalassaemia couples (2.5%). The majority of procedures (99.3%) were performed between 11 and 13 weeks of gestation. The procedure was successful in retrieving adequate amount of placental tissue for genetic studies in 551 cases (99.28%) and correct placement of needle was achieved in the first attempt in 97.8% of cases. Of the 548 chromosomal studies, 22 abnormalities were detected (4.0%), including 2 cases (0.36%) of confined placental mosaicism. A further 5 cases of major thalassaemia were diagnosed. Confined placental mosaicism which necessitated subsequent amniocentesis was only 0.36%. Eighteen cases resulted in pregnancy termination. There were 10 cases (1.8%) of unintended fetal loss after procedure, of which 7 (1.26%) were potentially procedure-related. The risks of fetal loss were 0% within 4 weeks of procedure, 0.36% within 6 week and 0.72% within 10 weeks. Since some of these fetal losses would be part of the background fetal wastage, the risk of procedure-related fetal loss after CVS was probably much lower than 1%. We concluded that CVS is an accurate and safe prenatal diagnostic test that should be available for women being counselled for prenatal diagnosis. (HKJGOM 2000; 1:21-27)

Keywords: Chorionic Villus Sampling, Transabdominal, Complications.