

PCR Detection of Herpes Simplex -2 Virus in Human Placenta in Patients with Spontaneous Abortion

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Abstract : Background: HSV-2 is thought to account the majority of cases of neonatal herpes, which may cause severe complications in infected newborns.

Objective: This study was carried out to investigate the rate of HSV-2 infection in placental tissue of women with spontaneous abortion by conventional polymerase chain reaction technique (PCR).

Materials and methods: Placental tissue samples were collected from 100 pregnant women with spontaneous abortion. Twenty five gram of the placental tissue was homogenized, the homogenate centrifuged for about 15 min. at 5000 rpm and (2-8) °C. The supernatant used for DNA extraction using DNA isolation kit ((DNA-sorb-B (Sacace)/ Italy) Kit).

Results: The results showed that, this gene was present in 19 (19%) out of 100 placental tissue PCR product of this gene was 120 bp, the highest rate was observed in age group (30-39) years. The highest fetal losses in studied group were occurred in the first trimester, there was a statistical significant ($P<0.006$) association between number of pregnancy compared to infection with HSV-2 and highly significant differences ($P<0.001$) with pregnancy outcome.

Conclusions: Herpes Simplex -2 Virus may play a significant role in pregnancy loss and can be delivery outcome-related factor. Its detection by sensitive molecular techniques would allow prompt therapeutic intervention in order to increase the possibility of a successful future pregnancy.

Keywords : Herpes Simplex type 2, placental tissue, spontaneous abortion, first trimester, gpG gene.