

## **HPV16 L1L2 VLP INTERACTION WITH HUMAN AMNIOTIC FLUID CELLS**

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The presence of Human Papillomavirus (HPV) in the organic fluids has interest at the clinical and basic research viewpoint. The prenatal HPV transmission was suggested, when it was confirmed that the surgical born did not protected children from the mother-fetal transmission. This study investigates the possibility of HPV16 interaction with cells from human amniotic fluid. For this, isolation and characterization of the cellular types present in the human amniotic fluid in different gestational stages were performed through cellular culture. Cell samples were obtained from amniotic fluid by transabdominal amniocentesis from women clinically recommended to this procedure. Interaction assays using HPV16 L1L2 VLPs (virus-like particles) in immunofluorescence methods were analyzed by laser scanning confocal microscopy (LSCM). It was possible to identify fibroblasts and hematopoietic precursor stem cells in the cultures. The CD34+/CD117+ stem cells interacted with the HPV16 L1L2 VLPs by the internalization through CD71 receptor, confirmed by LSCM. The possibility of the HPV16 to infect stem cells from hematopoietic precursor lineage can support the hematological way as possibility of infection, not considered in public health nowadays, mainly in the mother-fetal transmission hypothesis of HPV DNA sequences.

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