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**THE ROLE OF HUMAN PAPILLOMA VIRUS IN THE PATHOLOGY OF THE CERVIX
(LITERATURE REVIEW)**

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Cervical cancer is the fourth most commonly diagnosed cancer after breast cancer, colorectal cancer and lung cancer and the fourth leading cause of cancer death in women, with approximately 604,000 new cases and 342,000 deaths worldwide in 2020. Cervical cancer occurs through a staged process, from the transformation of normal cells into tumor cells, from a precancerous lesion to a malignant tumor. The most important risk factor is Human Papilloma virus (HPV) infection, the most common types being 16, 18, 31, and 45. The HPV genome has been identified in almost 95% of cervical lesions. Treatment of high-grade intraepithelial lesions of the cervix associated with HPV may delay or prevent progression to cervical cancer.

Collected data from scientific specialty literature, that were found in Google Scholar Search, and from published studies on PubMed, Scopus, International practice clinic guidelines, ESGO, NCCN, ESMO. The including criteria was the articles that contained the topic of "HUMAN PAPILLOMA VIRUS IN THE PATHOLOGY OF THE CERVIX".

Worldwide, cervical cancer (CC) has been ranked as the fourth most commonly diagnosed cancer and the fourth leading cause of cancer death in women. Cervical cancer occurs through a staged process, from the transformation of normal cells into tumor cells, from a precancerous lesion to a malignant tumor. Most CC cases result from infection with certain subtypes of human papilloma virus (HPV). The HPV genome has been identified in almost 95% of CC lesions. The main determinants of carcinogenesis, HPV, are proteins E6, E7 and E5. The expression of oncoproteins E6 and E7 induces genomic instability and accelerates the accumulation of mutations, thus leading to the development of malignant tumors. Treatment of high-grade intraepithelial lesions of the cervix associated with HPV may delay or prevent progression to cervical cancer. HPV induces p53 degradation, as well as decreases apoptosis and cell cycle arrest. HPV activates apoptotic signaling by stimulating pro-apoptotic genes, by activating specific transcription factors, or by directly modulating protein activities.

The most important risk factor for cervical cancer is Human Papilloma virus (HPV) infection, the most common types being 16, 18, 31, and 45. The treatment of high-grade neoplasms of the cervix is combined surgically, antiviral and immunomodulatory. Thus decreasing the risk of recurrence of the precancerous disease of the cervix and a subsequent transformation to cervical carcinoma.