Risk of Human papilloma virus in causing cervical cancer and the recent advancement in vaccination as a preventive measure

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Viruses account for about 20% of total human cancer cases. Although many viruses can cause various tumours in animals, only seven of them are associated with human cancers and are currently considered oncogenic viruses. These viruses include hepatitis B virus (HBV), hepatitis C virus (HCV), human papillomavirus (HPV), Epstein Barr virus (EBV), human herpes virus 8 (HHV8), Merkel cell polyomavirus (MCPyV), and HTLV-1. High-risk HPV strains are the major causes of cervical cancer and other anogenital neoplasms as well as a significant proportion of head and neck tumors. The molecular mechanisms of viral oncogenesis are complex and may involve the induction of chronic inflammation, disruption of host genetic and epigenetic integrity and homeostasis. The push to vaccinate girls in the age of 9. HPV is recognized by mainstream medical authorities as the most commonly sexually transmitted infection in the US with an estimated 20 million persons infected and over 6 million new infections annually. Merck, the maker of the HPV vaccine Gardasil, presented information to the Food and Drug Administration (FDA) prior to approval that their vaccine increased the risk of pre-cancerous changes by 44.6% in women exposed to HPV types 16 or 18 pre-vaccination. HPV vaccines have been shown to prevent cervical dysplasia. The protection against HPV 16 and 18 has lasted at least 8 years after vaccination for Gardasil and more than 9 years for Cervarix.

Mechanism of action: The HPV vaccines are based on hollow virus-like particles (VLPs) assembled from recombinant HPV coat proteins. The virus possesses circular double stranded DNA and a viral shell that is composed of 72 capsomeres. Every subunit of the virus is composed of two proteins molecules, L1 and L2.

Side effects: To the vaccine-risk aware community, your time to get loud is NOW. Some of these reports might be potential cases of Complex Regional Pain Syndrome (CRPS), a rare condition of persistent pain that usually affects arms, legs, hands or feet after an injury or trauma to that limb.

Biography
J. Joonu has completed her PhD at the age of 31 years from Bharathidasan university, Tiruchirappalli. She is working as Asst Prof, Dept of Zoology, Bishop Heber College in the permanent (aided) post. She has 8 years of teaching experience. She has published more than 8 papers in scopus indexed journals like AJMBES, & other international reputed journals and has six Nucleotide sequences in the GenBank. She has also presented many papers in the national conferences. She has received best paper award in the national conference. Her field of interest are environmental microbiology. Dr. J. Joonu has completed her PhD on 7-Sep-2016. The title of thesis is 'Bacterial metalloregulation and Antibiotic resistant character isolated from a heavy metal polluted environment. She has attended an International conference on Biodiversity and Bioactive natural products for human welfare sponsored by ICMR & DBT organized by the Dept of Botany at Govt Arts College, Karur. She has attended a National level Seminar on Leadership Training sponsored by UBCHEA organized by St. Christophers college of Education, Vepery, Chennai. Dr. J. Joonu has attended a Christian leadership training sponsored by AIACHE organized by RLC, Bishop Heber College, Trichy. College level workshop on 'Molecular & Immunological techniques' sponsored by DBT-Star College organised by Dept of Zoology, Bishop Heber College.

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