**Title: Asymptomatic Herpes Simplex type 1 (HSV-1) and Herpes Simples type 2 (HSV-2) infections in a group of substance abuse male patients with oral fibroepithelial polyps(FEP)s**

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**ABSTRACT** (250-300 words)

**Background**: Herpes Simplex type 1 (HSV-1), Herpes Simples type 2 (HSV-2) and Varicella Zoster Virus (VZV) are infectious agents comprising the subfamily of Alpha herpes viruses of Herpesviridae. These human pathogens primarily cause infection of muco-epithelial cells and establish latency in the peripheral nervous system. Under immune suppressive conditions, reactivation and viral multiplication in epithelial cells is possible. This may facilitate the entering of the virus directly into the brain via nerves.

**Objective:** To detect HSV-1 and HSV-2 DNA in oral fibroepithelial tissues of a group of male patients in Sri Lanka.

**Methods:** Excisional biopsies were taken from clinically diagnosed 26 oral fibroepithelial-Polyp (FEP) patients and stored at -800 C. Subsequently, DNA was extracted from frozen specimens, and Real-Time PCR was performed to detect target DNA of HSV-1 and HSV-2 separately. Socio-demographic and substance abuse data were collected from the same patients by a pretested interviewer-administered questionnaire. The data were entered and analyzed using the SPSS-21 Statistical Package. Descriptive and inferential statistics were used to find-out any statistical significance.

**Results:** Primer-specific HSV-1 and HSV-2 DNA were detected in 25% and 30% of oral FEP patients respectively, which denoted the asymptomatic (HSV-1), (HSV-2) infections in the same patients. All of them were substance abusers.

**Conclusion:** Substance abuse was statistically significantly associated (p<0.05) with asymptomatic HSV-1 and HSV-2 infections in a group of male patients with FEPs. The small sample size was a limitation in this study. This preliminary finding needs to be confirmed by powered studies.

**BIOGRAPHY** (100-150 words)

Manosha Perera, PhD is supportive of improving health and well-being through her expertise in laboratory diagnostics after two decades of experience in research, diagnostics teaching and administration both in healthcare institutions and reference laboratories. Screening for Alpha herpes viruses in asymptomatic patients which can cause a secondary central nervous system (CNS) in future, cannot be disregarded. Secondary information on the same (Dheerasekara et al., 2020) or related objectives (Lohitharajah et al., 2017) sheds light on evidence-based medicine. Vaccine production is of utmost importance in this regard. This approach is responsive to all stakeholders in the prevention of CNS infections by sexually transmitted viruses. At present she operates as an independent researcher after winning the Sunstar Perio Research Award 2022 as the second runner-up for one of her papers titled, inflammatory bacteriome and OSCC based on her PhD thesis. Her passion is to travel and present original work at international research symposiums.

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