

Clinicopathological Features and HHV-8 Expression in Gastrointestinal Kaposi Sarcoma: Over 20 Years of Experience at a Tertiary Centre in Tshwane

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Background and Objectives: Kaposi Sarcoma (KS) involving the gastrointestinal tract (GIT) represents an uncommon manifestation of this HHV-8-driven vascular tumour, and it predominantly affect people living with HIV. Early disease is often clinically silent, and subtle mucosal lesions are frequently detected at advanced stages with nodal spread and features associated with poorer clinical outcomes. Definitive diagnosis relies on histopathological assessment supported by HHV-8 immunohistochemistry. This study aimed to describe the clinicopathological characteristics of GIT KS, identify risk groups, and inform strategies for improved patient management.

Methods: This cross-sectional, descriptive case series analysed 10 histopathologically diagnosed cases of GIT KS between January 1, 2004, and December 31, 2024, at the Department of Anatomical Pathology at the Dr George Mukhari Academic Laboratory in Ga-Rankuwa, South Africa. Relevant demographic, clinical, and histopathological data were collected using a specialised tool, recorded in Microsoft Excel, and analysed using STATA version 18 software.

Results: The study showed a male predominance at 60% with the mean age of 33.2 years (range 22-43 years). All the patients were HIV positive (100%), with 40% on antiretroviral therapy (ART). CD4 counts were available in 90% of cases, of which 55.6 % (n=4/10) had counts below 200 cells/ μ L. The most frequently involved anatomical site was the stomach (30%, n=3/10). The most common clinical presentation was gastrointestinal bleeding (20%, n=2/10). The HHV-8 immunohistochemistry biomarker was positive in 90.0% (n=9/10) of the cases.

Conclusion: Gastrointestinal Kaposi sarcoma in this cohort reflects an HIV associated disease with a predilection for visceral involvement in the setting of immune dysregulation. The variable and often non-specific presentation of gastrointestinal involvement, which may delay recognition. The high rate of HHV-8 positivity reinforces its value as a key diagnostic

adjunct, particularly in morphologically challenging cases. These emphasize the need for heightened clinical suspicion in immunocompromised population.