

EXPRESSION OF THE HUMAN DWNN GENE IN HUMAN IMMUNODEFICIENCY VIRUS ASSOCIATED NEPHROPATHY

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Background: Since Human Immunodeficiency Virus associated nephropathy (HIVAN) was discovered in 1984 by Rao and a colleague, HIVAN cases have increased drastically and this kidney disease is now the leading cause of end stage renal disease (ESRD) deaths. HIVAN prevalence is constantly linked to people of African descent (90

Aim: The aim of this study was to analyze the expression levels of the three human DWNN gene products in HIVAN. The sites of localization of the three transcripts in normal kidney and HIVAN were determined.

Results: DWNN protein levels were shown to be up-regulated in HIVAN when compared to normal kidney tissues. Also *in situ* hybridization showed up-regulation of the DWNN mRNAs. In normal kidney cells the DWNN gene products are mostly expressed in the cytoplasm but in the diseased state DWNN translocates to the nucleus. High expression levels of DWNN were correlated with the levels of apoptosis in HIVAN and were found to be directly proportional.

Conclusion: Elevated levels of DWNN and apoptosis in HIVAN suggest the involvement of DWNN in the pathogenesis of this disease.