

Poster presentation

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Did AIDS viruses originate in India?

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Human Immunodeficiency Virus (HIV), the infectious agent of AIDS, is believed to have originated in non-human primates in sub Saharan Africa. The first case of HIV infection as well as first case of AIDS was reported in India 1986. Presently HIV infections were identified in 104 districts spread all over India including forest areas. The first case of HIV infection as well as first case of AIDS was reported in India 1986. Data from sentinel surveillance and national family health survey III in year 2005-6 revealed that 2-3.1 million people were living with HIV/AIDS in India in year 2006. Presently HIV infections were identified in 104 districts spread all over India including forest areas. Medical, archaeological, mythological, biological evidences point out the possibility of origin of AIDS in Indian sub continent. The man and monkey association started in India by Paleolithic period. We can find monkey paintings in various historic sites in Hindu, Buddhist literature. Monkey Gods are very common all over India, tribal and rural people built monkey god temples and preached. Many sculptures from 300 BC to 12th century AD depicted the monkey-man association. It is also depicted that the monkeys are giving medicine to the king that strengthens monkey-man association from many thousand years. In ancient Indian medicine, like Charaka Samhita (300 BC) AZOKSHYAM (degradation of immunity) an AIDS like disease was narrated. Many of the archaeological sites of period between 3000 BC to 1000 in India were displaced due to various viral diseases. Archaeological reports reveal that massive deaths occurred in those areas. In Indian culture there has been a long tradition of keeping the non human primates as pets (or) performance animals, animal markets and zoos. Indian

primates are primarily captured (or) produced for various reasons i.e. biomedical research, pets, private collection, folklore medicine and food. Monkeys are sold in weekly markets India Many parts of India monkey skulls are used for witchcraft and black magic, skin used for drum making. In folklore and tribal medicine, patients are made to drink live monkey blood (Chakmas and Riangs tribes) and cat brain, for curing Asthma, fever, body ache, and abnormal blood pressure and some times for gallstones. The consumption of primate meat by certain tribal and non tribal communities is still prevalent in north east and eastern India. The use of meat from hunted primates as a bait to agricultural pests is also common in the north eastern states. Portuguese and other colonial traders transported monkeys for folklore medicines. A few of these Indian monkeys were found to be serologically and virologically positive to simian retroviruses. Assamese Macaque (*Macaca assamensis*) harboured SFV (simian foamy virus) and HMS 50, pigtailed macaque (Macaque nemestrins) SFV-Hem-2 strain and Rhesus macaque (*Macaca mulatta*) SMV-BGH-4. Natural infection by simian retrovirus (SRV-6) in hanuman languor (*Semnopithecus entellus*) traced in two different geographical regions of India. Natural infection by simian retrovirus (SRV-6) in hanuman languor (*Semnopithecus entellus*) traced in two different geographical regions of India. Analysis of HIV-1 subtype C and HIV 2 genome sequences from India showed that these sequences were closely related to each other and phylogenetic analysis of these sequences clustered together and showed monophyletic lineage. Origin of AIDS in Indian peninsular should be investigated for SIV s in wild monkeys of India.