The Origin of AIDS

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Abstract: Although the scientific community has attributed the cause of AIDS to a trans-species crossover of retrovirus from apes into man, there is no tangible evidence for this. Another myth dispelled is that AIDS is a different disease in Africa. Retroviruses are ancient organisms. When scientists mapped the human genome they discovered that 20% of it appears to be loaded with fragments of retroviruses that have insinuated themselves over time. Although these particles do not reproduce or cause infection, they are transmitted from one generation to the next. They may even be beneficial. My hypothesis is that a relatively benign retrovirus whether human or simian has been transformed by passaging into the virulent form that is decimating the human race. Because of the fragile nature of the mucosal lining of the gastrointestinal tract including the rectum, anal intercourse allows organisms to enter the blood stream directly, not only retroviruses but also organisms found normally in the colon, for example, S. aureus that produces enzymes harmful to the immune system. Since new organisms are continually emerging because of repeated passaging, an effective vaccine is unlikely to be developed. Evidence is presented to show that a relatively benign retrovirus has been transformed by the process of passaging into the virulent one that we know as HIV/AIDS.

Introduction

HIV/AIDS remains a challenge. In 2009, according to the World Health Organization there were 35 million people worldwide living with AIDS. There were 2.7 million new infections and 2 million deaths, and the number continues to grow. The economic cost of this is staggering. In 2008, President Obama asked for $30 billion to provide treatment and prevention over the next five years. Although drug companies have reduced the cost of treatment to developing countries, how many AIDS patients have access to the medical supervision required every six months with the adjustment of medications required to control the disease?

And we still have no scientific verification of the origin of AIDS. This is important because without knowing what is fueling the epidemic we cannot control it. For the sake of expediency the scientific community has agreed that the cause of HIV/AIDS is a simian retrovirus that made the leap from monkeys to humans but this has never been

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1 Dr. Bilali Camara, Personal Communication
3 Dr. Paul Sandstrom, Personal Communication
4 Idem
scientifically demonstrated. As one virologist said to me recently: “It had to come from somewhere.”\textsuperscript{6} And I am about to tell you where.

But first, I shall briefly review the history of the disease we have come to know as HIV/AIDS. In the early 1980’s in the wake of the sexual revolution, young homosexual men began showing up in major cities with a wasting disease from which they finally died. The causes of death varied but mostly resulted from Kaposi’s sarcoma and opportunistic infections, for example, pneumocystis and avian tuberculosis, not commonly seen in normal humans.

Subsequently the wasting disease spread to intravenous drug users, and through the infected blood supply to hemophiliacs, and - through sexual contact - to women and the rest of the population. Infected mothers have passed it on to their infants during delivery and breastfeeding. Although physical manifestations of the disease varied from host to host, a common element emerged - a failure of the immune system.

In May 1983, doctors at the Institute Pasteur in France reported that they had isolated a new virus that they suggested might be the cause of AIDS. A sample of the virus was sent to CDC in Atlanta. There was some controversy over the name and in 1986, the International Committee on the Taxonomy of Viruses ruled that both the French and American names be dropped and the culprit should be known as Human Immunodeficiency Virus or HIV. Laboratory tests were developed to identify those carrying the virus. Unfortunately the antibodies take up to 12 weeks to manifest themselves, and one cannot be certain to be infection-free before 6 months. Some people may be infected but not sick like a group of prostitutes in Kenya but they can still infect others, as can those currently under treatment.

According to Dr. Paul Sandstrom, the precursors of human retroviruses date back to prehistoric times.\textsuperscript{7} Scientists have been able to map the human genome of which 20% appears to be loaded with fragments of various retroviruses that have insinuated themselves over time. Although they are not infectious and do not reproduce, particles of retroviruses found in the human genome have been passed on from one generation to the next. Some of these retroviral particles may even be beneficial.\textsuperscript{8}

In 2009, scientists reported that they have been able to decode the HIV virus genome contained in the lipid envelope. The pattern is a variation of four nucleic acids: adenine, guanine, cytosine and thymidine (AGCT).

In summary, we have a relatively benign retrovirus that has become lethal, killing its host. How did this happen? According to statistics from various public health

\textsuperscript{6} Sandstrom, Paul, Director National HIV and Retrovirology Laboratory, Public Health Canada: Personal communication, Feb.5, 2010.
\textsuperscript{7} Idem.
\textsuperscript{8} Idem.
departments, the highest incidence of HIV/AIDS occurs in those indulging in anal intercourse;\(^9\) and the Center for Disease Control claims that AIDS is 50 times higher in homosexual men.\(^10\) In a special consultation convened by WHO, Dr. G. Dowsett of Australia reported that up until 1992, 98% of the cumulative AIDS cases were found in the homo/bisexual category.\(^11\) At the same conference, Dr. C. Beeker reported that 22 – 26% of men who have sex with men reported that they had sexual contact also with women. Her conclusion was that a group of highly bisexual men were playing a disproportionately important role in HIV transmission.\(^12\)

Dr. Bilali Camara confirms this. While he was PAHO Director of the AIDS and Sexually Transmitted Diseases Division in the Caribbean he carried out a study of the prevalence of AIDS in three groups - men who refused to reveal their sexual identity, heterosexual males, and females. He found that the highest prevalence by far was in the first group. The incidence in heterosexual males was about half of the former, and it was negligible in women. He confirmed that those who refused to reveal their sexual identity were homosexuals, and gave the reason. In the Caribbean like in Africa, it is illegal to be a homosexual. They may go to jail, so men marry and have a family in order to conceal the fact but they carry on with their other lives in secret. He believes that bisexual males are the bridging group for AIDS into the general population.\(^13\)

When prevalence rates for HIV were found to be much higher in males indulging in anal intercourse in the western world, but were the same for males and females in Africa the logical conclusion was that we were dealing with two different diseases. Moreover, the definition of AIDS agreed upon by the international community – significant weight loss, fever, diarrhoea and lymphadenopathy - could apply to several other diseases that plague people in developing countries where insufficient food, unsanitary conditions, and over-crowding are normal.

But researchers are reporting that the incidence of anal intercourse in Africa is much higher in both males and females\(^14\) some of whom use it as a form of birth control. The subject however remains taboo in Africa. According to Falk, while the act is permitted, speaking about it is considered disgusting.\(^15\) As a result of this men marry and raise a family but continue their homosexual activity as well.

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10 Center for Disease Control August,24, 2009.
12 Dr. C. Bleeker, Idem.
13 Dr. Bilali Camara, during an interview at a Conference on International Health, Canada,
14 M Schwandt et al: Anal and Dry Sex in commercial sex work and relation to risk for sexually transmitted infections and HIV in Meru Kenya in www.stijournal.com
The high incidence of HIV in Africa is exacerbated because there is a myth among certain tribes that having sex with a virgin will cure AIDS. Even two and three year old girls may be infected in this way.

To conclude this section, we should consider the fact that in the 1980’s and 90’s, the New York State Public Health Department was tracing the contacts of all women with AIDS. They found that in every case the woman had had, in her past, a sexual encounter with someone who was engaging in anal intercourse. One woman had divorced her husband ten years previously, when she learned that he had a homosexual partner on the side.16 Subsequently, the Health Department discontinued contact tracing of women. One official claimed that the department did not have the staff, funds or time to continue.17

There are different types of HIV, ingenuously labeled Type I and Type II; and within these larger groups there are many different subspecies. This is not surprising when we recall that the AIDS virus, like other viruses, mutates.

Also, viruses can be modified by human intervention. Vaccine labs use a process called passaging to modify viruses to permit their use in vaccines. Louis Pasteur was the first to carry out this technique in order to develop a milder organism with which to vaccinate people in order to prevent death from serious infection, for example his rabies vaccine.

There are two ways to passage a virus: in vivo or in vitro. Because a virus requires living cells to survive either monkey kidney cells or egg media (Fig.1) are used. The human immunodeficiency virus is grown on human cell lines. In general, passaging may result in either milder forms of the virus or in more virulent forms. One may distinguish the virulent from the milder forms from the appearance of the colonies. Smooth colonies suggest that the virus is benign; rough ones indicate greater virulence.

When a virus is passaged in vivo, blood may be taken from one sheep in a herd of sick sheep and injected into a healthy animal. When the second animal becomes ill, blood is

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16 Personal communication
17 Personal Communication at a 3-day seminar hosted by the N.Y. Public Health Department during the World Summit on AIDS, September, 2005.
drawn again, and injected into a third healthy sheep. This may be done three or four times. Now, if blood is drawn from the last sick animal and injected into a healthy herd it will kill the herd more quickly than the earlier virus with the original sheep. By passaging the virus from sheep to sheep one has transformed a relatively benign virus into a lethal one.

There are other examples. In a family with several children, the one who contracts Rubella first may have only a mild infection. The second will be more ill, and the last child to catch the infection may be bed-ridden. In an epidemic of flu viruses, many cases go undetected, while others become very ill and die. Some of this may be attributed to other factors, but passaging of the flu virus certainly has a role to play. This is one reason why the good public health practice of isolating those with infectious diseases is so effective. This may also be why the more recent swine flu epidemic was aborted. People wore masks and took other measures to avoid contracting the disease and passing it on to another.

Now, let us consider how HIV is passaged in vivo.

First, it is important to look at the microscopic structure of the gastrointestinal tract that extends from the mouth to the anus. The sole function of this organ is to process food. Digestion starts in the mouth with the aid of salivary enzymes that start to break down sugars. The stomach secretes acid and enzymes to process protein. In the duodenum Brunner’s glands secrete mucus to neutralize the acid secreted by the stomach, and enzymes to digest protein. The process continues throughout the small intestine where proteins, carbohydrates, and fats are broken down and absorbed. In the colon, mucus is secreted to lubricate gut contents. Waste products such as foods that are indigestible are then extruded via the rectum and anus.

To facilitate the process of absorption and secretion, the mucosa from stomach to rectum is lined by a single layer of columnar epithelial cells arranged in straight tubular crypts. (Fig. 2) Blood vessels are seen directly under the fragile mucosa. The crypt epithelium includes stem cells that replenish the epithelium every few days. Beneath these columnar cells is the muscularis, a thin layer only a few...
muscle fibres in thickness. It does not take much trauma to cause the rectum to bleed, and any injury to the mucosa will allow bacteria and viruses to enter directly into the blood stream.

Now let us compare this with the lining of the vagina. The vagina too has one function: to receive the sperm that will fertilize the egg to ensure the continuation of the human species. It also acts as a birth canal to allow the child to exit during delivery. Although scientists commonly refer to its lining as vaginal mucosa, it is not mucosa as we shall see.

The lining of the vagina is relatively tough composed of stratified squamous cell epithelium, like the skin covering the hands, for example. (Fig. 3)

Beneath the squamous cell epithelium is a protective layer that lines the vagina. Finally, there is a single layer of germinal cells (very dark purple) attached to the basement membrane (the wavy line between the very light pink and very dark purple). Above this are many layers of maturing cells. Each dot is the nucleus of a cell. The closer we get to the top of these layers the flatter and more squamous-like they become.

Beneath the basement membrane we can see dense connective tissue (very light pink). And this is where the blood vessels are seen.

Squamous cells are desquamated or sloughed off, and as they die they release glycogen that is metabolized by endogenous bacteria to lactic acid, a relatively strong acid that is also protective against pathogens or disease-causing bacteria. This is in addition to the lactic acid produced by vaginal bacteria themselves to maintain a normal pH of 4.5. Physiological cervicovaginal acidity can partially inactivate HIV. Also contributing to vaginal health are local immune factors, female hormones, and the menstrual cycle.

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Disturbing the healthy “vaginal ecosystem” are douching, sexual practices, and the use of contraceptives. STD’s that result in inflammatory responses (increased blood vessel permeability, tissue swelling and irritation resulting in local invasion by lymphocytes and macrophages) can contribute to increased susceptibility to HIV.\textsuperscript{20, 21} When the vagina is inflamed, microabrasians occur, resulting in an influx of white blood cells and red blood cells, and infection-causing bacteria, that raise the pH to 5.5 – 7.0. Test-tube research has shown that there is a synergistic enhancement of HIV replication by both chlamydia and the presence of inflammatory white blood cells.\textsuperscript{22}

In summary, the healthy vagina appears to resist invasion by harmful organisms including HIV. Those with genital sores and bacterial vaginosis are more susceptible to infection.\textsuperscript{23} The question remains whether HIV can penetrate a healthy vagina. A second question follows. In the present climate of sexual revolt, how prevalent is a normal vagina?

Anorectal Junction

In order better to compare the difference between the vaginal lining and the rectal mucosa, I have included a microscopic section through the anorectal junction. (Fig. 4) This allows easy comparison of the mucosa of the intestine with squamous cell epithelium typical of the vaginal lining.

To summarize thus far: I have outlined the functions of two organ systems in the human body - the gastrointestinal tract and the reproductive tract in the woman. Each is designed to carry out a specific function. Now let us consider what happens when this is disturbed or when these systems are subjected to abnormal conditions.

The fragile mucosa of the colon and rectum is easily lacerated. The sexual act can be a violent one often resulting in anal fissures and fistulas, anal condylomata, haemorrhoids

\textsuperscript{20} K.Kun, Vaginal Drying Agents and HIV Transmission, Family Planning Perspectives, Vol. 24, 2 pp.93-94
\textsuperscript{21} JR Schwebke: Abnormal Vaginal Flora as a Biological Risk Factor for Acquisition of HIV Infection and Sexually Transmitted Diseases in Journal of Infectious Diseases 2005:192 (15 Oct.) p.1315-1317
\textsuperscript{22} D.V. Landers et al. Fourth Conference on Retroviruses, January 1997; abstract 278.
and diarrhoea, all referred to as the “gay bowel syndrome”. But there is a more ominous problem: each time anal intercourse occurs and the anal mucosa is ruptured, whatever organisms are in the colon – even the natural inhabitants such as E. coli, Staphylococcus aureus or other nefarious organisms – are allowed into the blood stream and the retrovirus of HIV/AIDS is passaged. And each time it is passaged it mutates. Since the blood vessels are situated immediately under the one-celled mucosa, whatever is in the colon has free access to the blood stream and to the mechanisms designed to combat foreign invaders.

**Discussion**

In an elegant study by Vartanian and colleagues, it was demonstrated that RNA viruses during replication in vitro produce so many different types of species that they must be described in terms of populations of related but distinct genomes called quasispecies. They found that this is also true of HIV, but the difference is that HIV seems more capable of elongation beyond nucleotide mismatches than do avian or murine reverse transcriptases. These quasispecies can readily adapt to different environments by selection of preexisting variant(s).24

Reimann and colleagues were able to passage a simian virus in rhesus monkeys in vivo, with a needlestick, and after two serial passages were able to induce lymphopenia and an AIDS-like disease with wasting and susceptibility to opportunistic infections.25

Contact between man and chimps has gone on for centuries in Africa. Marx et al accepting that HIV emerged from two dissimilar simian immunodeficiency viruses (SIV) questioned why the disease had not emerged earlier. They state that there is no evidence that HIV ever existed in Africa or Europe and the New World prior to the 20th century. They postulate that new ecological factors arose in the 20th century that facilitated the transformation of SIV to HIV, namely the popularity of medical injections introduced by 20th century physicians, with the use and reuse of needles that were responsible. They were able to demonstrate that serial passage of partially adapted SIV between humans could produce the series of cumulative mutations sufficient for the emergence of the AIDS epidemic.26 In view of the results of this study there is no doubt that passaging does occur with IV drug abuse. The delay in converting to a positive test in those affected may be related to the time it takes for the virus to mutate.

But passaging does not require a needle stick. As long as the mucosa is breached by whatever means to allow organisms into the blood stream passaging can occur, and who passages a virus more often that those engaged in anal intercourse?

Since homosexuality has existed for centuries, why did not the disease emerge earlier? The answer becomes obvious when one considers that it is only relatively recently that medical advances have permitted the human life span to exceed 70 or 80 years, except for those engaged in the homosexual lifestyle. Their life span averages 49 years\(^{27}\). In the past, plagues, wars, and natural disasters killed whole populations at a much earlier age. Also at that time, women lead more sheltered lives and their rendezvous with men were chaperoned. Moreover, anal sex was considered a male prerogative. There have always been prostitutes but men did not go to them for anal sex. With the sexual revolution and female emancipation of the 1960’s, some men started to treat women as equals and the lethal retrovirus was allowed to cross boundaries rarely ever breached before that time.

Although prevalent among certain groups, homosexuality has been frowned upon until the middle of the last century. As indicated earlier, 22 – 26% of men admit to bisexuality. How many are there who conceal the fact, especially in Africa and Muslim countries where homosexuality is illegal and can result in dire penalties. Consider that once the lethal organism has emerged into the general population it will infect anyone with whom it comes into contact including the previously mentioned young virgins.

There is other supporting evidence for this. Several articles appearing in the popular press have warned of the dangers of POZ parties. These are exclusive gatherings of HIV-positive men who meet to have sex with other HIV-positive men. Researchers warn that this could lead to a spread of HIV “superinfection”.\(^{28}\) The parties were originally developed in the 1990’s by a handful of gay men who were concerned about infecting others. A pilot study of 11 men who attended POZ parties in NY, as well as Toronto and other Canadian cities suggests that the high rate rates of unprotected sex with multiple partners could potentially spread drug-resistant strains of HIV. Dr. Thomas R. Frieden, city health commissioner, NY City, alerted the medical and wider communities regarding the real possibility of a strain of AIDS virus that is resistant to 19 of the 20 available drugs and may lead to a more rapid progression of HIV infection to AIDS.\(^ {29}\)

Because of the continuing emergence of new strains of HIV it is safe to predict that there will never be a vaccine against HIV.

\(^{27}\) Human Rights Complaint Against the Government of Canada: Health Canada and the Public Health Agency of Canada February 2009 page 2


One avenue for future exploration is the possibility that HIV requires the assistance of colon inhabitants for example S. aureus to overcome the natural resistance of the body to invaders. It has been found that S. aureus produces enzymes that allow it to defend itself against the immune system.\(^{30}\) Also, Ardura and colleagues have demonstrated that invasive S. aureus significantly reduces the absolute number of CD4\(^+\) T cells in patients when compared with controls.\(^{31}\)

In summary, it is my thesis that HIV is a designer virus that evolved from the activity engaged upon by those who indulge in anal intercourse. It became epidemic and even pandemic when bisexual men infected women.

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