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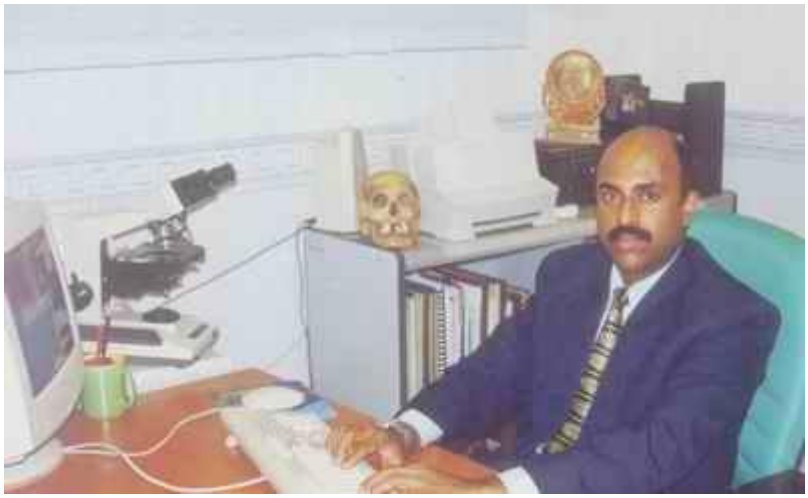
Discussion Forum

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Can you catch HIV from doing autopsies?

Comments by Dr. George Paul, Malaysia
(Received on May 17, 2000)

Dr. George Paul, Malaysia



Well as far as HIV is concerned, you probably can't catch it by autopsy! Ask me, I should know, as I accidentally cut myself while taking out the neck structures by the blind procedure we follow here, by giving the neck incision only about an inch or two above the suprasternal knotch and then blindly sweeping the blade (P.M. 40) and freeing the skin and then the tongue and neck structures blindly from below.

This case had to be done at about 3 p.m. (it came after lunch) and seeing the emaciated status of the body and a few prick mark scars here and there, we sent the blood for HIV and Hepatitis screening. It was getting to be 4 p.m. and the result was not yet available, and the relatives could not wait, and I had no intention to go home and come back later when the report was made available. I started the case, and then got pricked. Well, we have protocols like informing the infection control unit, taking our own screening blood and that of the patient's in case of accidental sharp or needle sticks, but nothing much comes of it.

The report gave Elisa test +ve for HIV! I then got myself screened 3 times in these three years, and still am HIV and Hepatitis -ve, by the grace of God! I even have the experience of a sharp stick in the NIPAH virus autopsy I was doing, and even there too did not show any antibodies subsequently!

What I do is simple. I always wear double gloves, and when I do prick myself, I first rinse the part with concentrated bleach, then pour 99% ethanol or methanol on it, pour some into a new glove and put it on (-double of course) and continue!

So one cannot guarantee anything in life but we have to go on with it. It is no way as dangerous as Ebola virus or other of the new Haemorrhagic Arboviruses which have been reported in deaths of the medical personnel working on them in Africa, etc.

Comments by Dr. Gyan Fernando, UK
(Received on June 26, 2000)

Dr. Gyan Fernando, UK



I have had a similar experience although it was not connected with AIDS, but with Rabies. In 1975 I was working in a very remote part of Srilanka called Mahiyangana as a doctor-of-all-trades,which included carrying out autopsies in remote villages in the jungles on makeshift bamboo autopsy tables. On one occasion I was asked to carry out an autopsy on a pregnant woman who died of rabies. She had been admitted to hospital sometime before death and I myself had diagnosed the rabies. When given the grim prognosis her relatives decided to take her home for Ayurvedic treatment but of course she died a few days later in her village. I was therefore rather surprised when I was asked by the local coroner (a man from the same village as the deceased) to carry out an autopsy.

In any case I was young, reckless and needed the experience as well as the money. The deceased was heavily pregnant (near term if I remember correctly) and halfway through the autopsy I was asked by the coroner if, when I remove the unborn baby, could it be kept separately from the mother's body. It was much later that I realised why. Apparently, in that part of the country there is a superstitious belief that if a pregnant woman is buried with the foetus still inside then the foetus comes back as a monster known as the "Bodilima". The cheapest way of getting the foetus out was to ask for an autopsy! As I said the coroner was a local man.

Unfortunately, I cut myself during the autopsy. I was young and newly married and the prospect of dying from rabies was not an attractive one. So I consulted the Consultant Physician of the nearest General Hospital. Apparently-certainly at that time -there were no recorded instances of human to human transfer of rabies. However I was adviced not to become the first case of human to human transfer but to take the vaccine like a good boy.

At that time the vaccine consisted of 21 painful injections of 5ml each, which because of the volume, had to be administered into the subcutaneous tissue of the abdomen around the umbilicus. The only redeeming feature was that most of the injections were administered by a very pretty young nurse by the name of Sepalika.

The vaccine at that time was made out of rabbit brains (unlike the present day duck egg vaccine) and one of the side effects was demyelination. For many years I worried about the prospect of getting demyelination!

Anyway here I am with no serious evidence of demyelination.

Comments from the Editor in Chief

(N.B. These comments have been added continually even after closure of this issue, so many comments are really post-dated to this issue.)

We have heard what these experts have to say. They have said from their own experiences. I made my own enquiries from some experts I know, because I keep cutting myself often during autopsy.

One expert (Dr. Vijay Dhankar on October 8, 2007;) told me something which sounded very reasonable to me. He said that if you cut yourself accidentally during an autopsy (or on a live patient during surgery for that matter), you immediately take a sample of blood from that body (or patient) and send it for HIV testing. Simultaneously start prophylactic treatment with Lamivudine 150 mg and Zidovudine 300 mg. This comes combined in a single tablet, and for a complete prophylaxis you have to take one tablet twice a day for 28 days. The problem with complete course is that the tablets are very toxic, and you run a very real danger of bone marrow depression and acute liver failure, among other things. Then wait for the HIV results to come. If they come negative (which should be within a couple of days at the most), stop taking the drug, and you run the risk of having taken just about 4 toxic tablets. If, on the contrary, they come positive, complete the course, and you have the justification of taking the toxic drugs for a very sound reason. There is one problem with this method though. If the patient is in window period, you would get a negative test for HIV, while the patient is infective. You would stop the prophylactic drug thinking that the patient was HIV free, and run the risk of getting HIV. But this is a minimal risk, which Dhankar feels, is reasonable to take. Of course, you have the option of completing the course irrespective of what results come back. Indeed, if you have decided to do that, there is no real need of even sending the patient's blood for HIV testing!

Another expert (Dr. Kulo Kapfo, Medical Officer at the Antiretroviral Therapy Clinic being run at Room no. 32, L.N. Hospital, New Delhi;) told me on the same day that the risk of acquiring HIV infection from accidental pricks from known HIV cases was just about 0.03%. I do not know wherefrom he has taken these figures, but I would take them to be authentic since he is working in this field for long. Combined to this, is the fact that the incidence of HIV in general population in India is about 1%. So if you cut yourself accidentally during postmortem examination of an individual with unknown HIV status, the overall risk of acquiring HIV infection is so minimal that it does not justify taking those toxic drugs (in case you have forgotten to take the sample of blood as

indicated above). Dr Kapfo also told me that to be effective, the prophylactic treatment has to start within 72 hours of exposure and not later. Of course, sooner the better.

Well, these are the practical experiences of some experts to whom I have talked personally. Here are some important references from literature which are likely to shed more light on this issue. I have read these papers in detail, and although most talk about the fact that HIV remains viable in postmortem specimens for quite a long time, they do not shed light if they retain their infectivity.

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6. de Craemer D. Postmortem viability of human immunodeficiency virus--implications for the teaching of anatomy. *N Engl J Med*. 1994 Nov 10;331(19):1315. [PubMed]
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9. Fernandes CL. HIV and Forensic Medicine 2007 - An Emerging Problem (Editorial). *Anil Aggrawal's Internet Journal of Forensic Medicine and Toxicology*, 2007; Vol. 8, No. 1 (January -

June 2007): http://geradts.com/anil/ij/vol_008_no_001/others/editorial.html; Published January 1, 2007. [ ]

Readers may want to submit their experiences on this problem either by E-mail or by snail mail at the following address (Even if this issue is in *Archives* section, as readers come to the archives section more often, and we keep it updated!).

If you have interesting questions like this one, please send them over to me, so I can host them over the net. Every one can then contribute his own experiences on the problems posted. It is the web which makes such a lively discussion possible. We all can contribute our own bit of experience and absorb a lot more from the collected wisdom of all the others. This kind of discussion is probably not possible in routine "paper" journals.

Discussion Forum - Next issue

