

## Analysis of the Medical expert opinion by CBI

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Opinion was given by the doctors of Patna Medical college, Safdarjang Hospital and AIIMS in Gautam and Shilpi Jain's death case. These opinions were interpreted by the CBI as under, which was reported in Hindustan Times on 07/08/2003, Patna edition. By going through the contents of the following subject matter, readers will find it useful to understand the significance of the opinions /subsequent opinions given by them.

Expert opinion in the case of Gautam Singh and Shilpi Jain is illustrated below as :

### **OPINION:**

1 Time elapsed since death: Twenty-four for thirty-six hour.

2. Cause of Death : Opinion reserved till chemical analyzer report.

Investigation further revealed that in the post-mortem report in respect of Ms Shilpi Jain aged 22 yrs the doctor mentioned the injuries as follows:-

“On examination no mark of any injury seen on the body. On dissection all the viscera in general were highly congested. Heart-Right full, left empty, stomach contain two ounces chocolate colour fluid, smell offensive garlic like, Mucosa highly congested and ulcerated at two places. Pubic hair short but no matting seen at the outlet of vagina, some dry white discharge seen, it admits two to three fingers easily. Inner portion wet and congested. Uterus normal, a light vaginal swab taken and sent to Microbiology department for comment regarding spermatozoa and sperm. Following viscera has been preserved for chemical analysis: A portion of heart, lung, liver, spleen, whole left Kidney and stomach as a whole with its contents:-

### **OPINION:**

1. Time elapsed since death: Twenty four to thirty six hour approximately.

2. Cause of death: Opinion reserved till chemical analyzer report.

That during the course of investigation some allegations came to light that Ms Shilpi was gang raped by friends of Gautam and Shri Sadhu Yadav was also involved in this. Therefore, the clothes of two deceased which were found in the Maruti car by the police were sent to the center for DNA Fingerprinting and Diagnostic at Hyderabad for DNA test and opinion. The clothes included the white salwar, handkerchief, red printed towel, ladies dark brown panty (Kathai), printed gents underwear, T-shirts, full pant. The CDFD after examination gave their opinion report No. LS-DNA –FP Fingi 2000544 dated 28.01.2002 which reads as follows:

“To obtain DNA, all the sources of the above exhibits were subjected for DNA isolation, high molecular weight DNA amenable for analysis, was recovered from the source of exhibits A (from the stain on it, marked as “A”), D,L and M. The other stain marked A-1 on the source of exhibit A did not yield DNA suitable for analysis. The other exhibits also yielded highly degraded DNA,, which was not suitable for analysis. In order to arrive at a conclusive opinion with a high probability value, 10 STR loci was used in the analysis of each sample.

The procedure adopted for isolation of DNA from these exhibits was single lysis method and not preferential lysis method. Single lysis method yields DNA of both the epithelial cells of the victim as well as the sperm cells from the semen.

On comparison of the DNA fingerprints of the sources of exhibits A (Stain marked as “A”\_, D.L and M, it was found that the DNA present on the source of exhibit A (white ladies ‘salwar’ containing the stain marked ‘A’) contains the mixed DNA profile of he sources of exhibits L and M (viscera pertaining to Ms Shilpi Jain and Gautam Singh respectively). The DNA recovered from the

stains on the source of exhibit D (ladies dark brown [kathai] panty) marked 'D' contains the DNA profile of the sources of exhibits L and M (viscera pertaining to Ms Shilpi Jain and Gautam Singh) and another unknown human individual.

## **CONCLUSION**

The above test (STR analysis) is sufficient to conclude that:-

1. The DNA present on the source of exhibit A (White ladies 'salwar' containing the stain marked 'A') is the mixed DNA profile of the sources of the exhibits L and M (viscera pertaining to Ms Shilpi Jain and Gautam Singh respectively).
2. The DNA recovered from the stains on the source of exhibit D (ladies dark brown [kathai] panty marked 'D') is that of Ms Shilpi Jain and Gautam Singh (the source of exhibits L and M respectively). This profile also indicates that it contains the DNA of another unknown human individual."

## **Blood samples**

That in view of the opinion received from CDFD, Hyderabad, during the course of investigation, blood samples friends of Gautam namely, Sh. Manish, Rakesh, Pankaj, S P Singh, Ashok Yadav were obtained and sent to CDFD for comparison but the blood sample did not match with the seminal stains found in the panty of Ms Shilpi. Therefore the blood sample of uncle of deceased Shilpi namely Sh. Sajal Kumar Jain who has been staying with the family for a long time was also obtained and sent to CDFD for comparison but that also did not match. Detailed investigation was carried out by examining the known friends and relatives of both the deceased to find out the names and details of all the friends and or enemies of deceased. However, no further information could be collected. Detailed investigation was also carried out to ascertain the other contacts and boyfriends of deceased Shilpi but no clue about this could be collected during the course of investigation.

## **Sadhu Yada's refusal**

Sh. Sadhu Yadav, MLA, a friend of Gautam was also contacted on a number of times for providing blood samples for comparison and opinion by CDFD, Hyderabad. Sh Sadhu Yadav mentioned that it has already been published in the newspapers, magazines etc., that attempt may be made to involve him in this case and spoil his political career and therefore he refused to provide the blood samples. Sh. Shadhu Yadav stated that Sh. Gautam was a party worker and therefore he knew him and they used to meet each other. He also stated that when the friends of Gautam came to him complaining about the missing of Gautam, he (Sadhu Yadav) had telephoned to the IG Patna and had instructed him to make all efforts to trace Gautam and the Maruti car in which Gautam was reported to have gone. He had also telephoned to the SHO of Gandhi Maidan Police station and told him to register a case. He had also instructed friends of Gautam to go to the police station and logged a complaint. Subsequently, when he was informed about the finding of the dead body of Gautam and Shilpi in a Maruti car inside the garage of the house of Gautam, he had immediately visited the spot and had instructed the police to take necessary action as per law, in presence of number of persons present at the spot. He denied his involvement in the murder. However, he refused to provide the blood samples for comparison purpose.

That to get some clarification as reference was sent to CDFD, Hyderabad again for clarification on the following points:-

1. Whether the stain is a seminal stain or any other type of stain;
2. If this is some other type of stain what would be the body fluid which could have caused such stain;
3. Whether the age of the stain is similar to the stain caused by the semen of Gautam;
4. Whether it possible to extract DNA from a stain after the cloth has been washed.

That in reply to this, the CDFD, Hyderabad sent their opinion which reads as follows;\_

1. "We have repeated the analysis again and found the stain is a seminal stain because we have used the differential lysis method for DNA isolation which removes all cells except sperm cells;
2. It is only a semen stain and no other stain;
3. It is not possible to establish the age of the stain apart from the semen of the Gautam;
4. If a stained cloth is washed vigorously with detergent; it may not be possible to isolate DNA from it. However, the nature of the fabric and the dyes contained within the fabric plays a role on the stability of the DNA molecule."

That during the course of investigation Prof. T.D Dogra, Head of the Department of Forensic Medicine & Toxicology, All India Institute of Medical Sciences, New Delhi was requested to visit the scene of occurrence and give opinion from Forensic Medicine point of view regarding the death of two deceased. Accordingly Dr. T.D Dogra along with Dr. Arbind Kumar Singh from Patna Medical College who had conducted the post mortem examination visited the scene of occurrence, examined the same and submitted their opinion which reads as follows:-

"A meeting was held between Prof. T.D Dogra and Dr. Arbind Kumar Singh, Department of Forensic Medicine & Toxicology, Patna Medical college, Patna at 2pm on 22.01.02 to discuss the above referred case. It was decided to jointly visit the scene of occurrence, accordingly scene of occurrence was visited on the same day i.e 22.01.02 at 3pm.

The sketch of scene was got prepared on our joint direction by Shri RK Jha which is attached here with it is the same garage which is shown in three photograph marked A, A1 and A2 on backside which was duly signed on back.

After careful consideration of the documents as provided by the CBI mentioned in their letter from point 1-7 (one to seven) in letter dated 18.01.02 referred above, we are of the considerate opinion that the cause of death of Sri Gautam, post-mortem report no. 1061 dated 3.07.99 was due to aluminum phosphide poisoning as viscera gave positive test for aluminum phosphide vide original report FSL No. 364/99 dated 28.07.99 from the office of Director, FSL, Patna. The cause of death of Shilpi Jain, postmortem report no. 1062 dated 03.07.99 was due to aluminum phosphide poisoning as viscera gave positive test for aluminum phosphide vide original report FSL No. 363/99 dated 28.07.99 from the office of Director, FSL, Patna.

Aluminum phosphide is a common poison for committing suicide, due to its peculiar smell it is unlikely to be administered to a person without his knowledge. As there is no evidence of any mark of struggle on post-mortem examination indicating homicide so after considering the circumstantial evidence and other facts we are of considerate opinion that this could be a case of suicidal pact.

Sd/(Dr. Arbind Kumar Singh)

Sd/(Prof. TD Dogra)

That during the course of investigation the department of Forensic Medicine and Toxicology, All India Institute of Medical Sciences, New Delhi was requested to examine the post mortem reports, FSL reports, photographs of the scene of occurrence, CDFD opinion etc., and give their opinion from forensic expert point of view. A team of expert headed by Dr. T.D Dogra, Professor and Head of the Department of Forensic Medicine & Toxicology, AIIMS consisting of Major (Dr.) Abhijit Rudra, Dr. Sanjeev Lalwani, Dr. D.N Bhardwaj of the said department gave their opinion which reads as follows:

"After careful perusal of the above mentioned documents we are of the considered opinion to the questionnaire mentioned in aforesaid letter as under-

### **Suicidal or Homicidal**

1. Whether the death is suicidal or homicidal in nature
2. Whether it could be the result of suicidal pact

Answer 1 & 2: The report of chemical analysis of viscera gave positive tests for aluminum phosphide in both the cases. The aluminum phosphide is a common poison used for committing suicide, due to its peculiar smell it is unlikely to be administered to a person without his knowledge. As there is no evidence of any marks of struggle reported in post-mortem report on the body of both the deceased Gautam and Shilpi indicating homicide, the death of Gautam and Shilpi could be suicidal in nature. After considering the circumstantial evidences and other facts we are of the considered opinion that this could be a case of suicidal pact.

3. Whether two different seminal stains could be of two different times.
4. Whether two seminal stains could be from two different persons.

Answer 3 & 4-There could be two different seminal stains originating from two different persons at two different times.

5. Whether two different seminal stains could originate from two different persons at two different times.

Answers-There could be two different seminal stains originating from two different persons at two different times provided the women had sexual relationship with two different persons at different times.

6. Whether the deaths were cause by Carbon Monoxide.

Answer- No definite opinion can be given in this regard as FSL report in reference to both deceased Gautam and Shilpi states-"Carboxy-Haemoglobin in brownish fluid and in aqueous extract of portion of heart. Opinion regarding carbon monoxides poisoning

was inconclusive due to non availability of a proper blood samples.”

However, in the given circumstances where Gautam and Shilpi were in the closed car inside a closed garage with air conditioner on the possibility of death due to carbon monoxide in such cases is very likely, but it cannot be affirmed due to inconclusive FSL report in regard to Carboxy-Haemoglobin. Therefore, the death can only be attributed to the Aluminum Phosphide poisoning for which viscera has given positive test.

7. Any other information and opinion connected with and relating to the case.

Answer- Nil

Sd/Major (Dr.) Abhijit Rudra, Junior Resident

Sd/Dr. Sanjeev Lalwani, Junior Resident

Sd/Dr. DN Bhardwaj, Associate professor

Sd/Dr. TD Dogra, Prof. & Head

Investigation further revealed that Aluminum Phosphide has the advantage of being cheap, efficacious, easy to use and freely available in the market. On coming in contact with moisture, this liberates phosphine, which is toxic. Human toxicity, which is usually acute, occurs due to toxic effects of phosphine, which is released in the stomach after ingestion of the poison. It is the single most frequent suicidal method in North India according to the experts. The mode of poisoning is usually intentional (suicidal), occasionally accidental and rarely homicidal. They are known to cause serious illness more severe toxicity produces numbness, parasthesia, tremors, muscular weakness and paralysis. The poison is dangerous to life. At a level of 400-600 PPM it is lethal within half hour. The fatal dose for human is 150-500mg for a 70 kg person.

### Deadly phosphine

According to the experts within 15 minutes of taking of this poison the person may not be able to move his hands etc and therefore, may not be able to put on his clothes. Lack of specific antidotes is the biggest lacunae. Death usually occurs quickly and frequently before the transportation and hospitalization of the victim possible. Phosphine is a colourless gas with characteristic garlic or decaying fishlike odor. These are available in tablets and powder form. The effect depends upon the consumption. Autopsy findings in the patients show blood-tinged froth at mouth and nostrils and garlic like odor, mucosa is congested.

That during the course of investigation to clarify some points and have another independent opinion from Forensic Medicine Expert, the case was discussed with Dr. Alexander Khakha, Head of the Forensic Medicine, Safdarjung Hospital, Delhi, a well-known forensic medicine expert having experience of conducting number of sensitive postmortem examinations. After examining the case, details of the relevant papers. Dr. Khakha gave detailed opinion which inter-alia reads as follows;

“Rigor mortis is present in all muscles of the body within 4 hours of death. After 12 to 18 hours of stay, it begins to pass out chronologically in the order of appearance. So by the last phase of 24 hours i.e 20-24 hours, we can expect rigor mortis to disappear in most of the muscles of the body except the muscles of the lower limb, toes and fingers. Therefore in this particular case, time passed from time of death to the time of post-mortem examination should be approximately 20-24 hours (average 22 hours). The time of post-mortem examination was 9.35 PM on 3.7.99. Therefore, the time of death should be 22 hours prior to 9.35 PM (03/07/99) which is 11.35PM on 02/07/99.

The photographs taken at the scene of crime shows the body of Gautam in a sitting position with the head, chest and abdomen tilted towards the right side. The post-mortem examination confirms that the post-mortem staining was fixed towards the same side i.e more marked on the right face, right side chest-abdomen, both buttocks and lower legs. This means that the body was lying in the same position as it was recovered at 6.30PM on 03.07.99 and was undisturbed for at least 5 to 6 hours after death. So now it can be safely assumed that the death took place at around midnight of 2-3/7/99 and in no case afterwards. Now if the inference about the time of death by rigor mortis is also taken into consideration, the time of death can be safely determined as 12'Oclock midnight of 2/7/99 and 3/7/99.

One tablet of Alphas/Celphos/Quickphos is sufficient to kill a person weighing 70 Kg in an average time of 31 hours. But if higher dose (2-3 tablets) are taken, the patient develops fatal ADULT RESPIRATORY DISTRESS SYNDROME with cyanosis within 6 hours.

Viscera analysis report has confirmed the presence of Aluminum Phosphide. Garlic smell present during the post-mortem examination suggests ingestion of Aluminum Phosphide. Bleeding inside the stomach caused by two ulcerations suggests high dose of Aluminum Phosphide ingestion. Stomach containing chocolate-coloured fluid suggests bleeding occurring in the stomach and

blood mixed with hydrochloric Acid in the stomach.

So now we can opine that the cause of death in this case was due to ADULT RESPIRATORY DISTRESS SYNDROME resulting from high dose of Aluminum Phosphide ingestion (Or poisoning).

Coming to the time of ingestion of Aluminum Phosphide tablets, it is clear that if high dose of Aluminum Phosphide is taken, patient develops fatal ADULT RESPIRATORY DISTRESS SYNDROME within 6 hours. So the time of ingestion can be estimated to at least 6 hours prior to the time of death i.e hours prior to 12 midnight of 2/07/99 and 03/07/99 which mean around 6PM on 02/07/99.

### **Can it be a case of Homicide?**

Now that it is clear that death in this case was due to ADULT RESPIRATORY DISTRESS SYNDROME resulting from ingestion of high dose of Aluminum Phosphide, Question arises, can this have a homicidal angle. Homicide ingestion of Aluminum Phosphide can take place, either with the knowledge of the victim e.g by force, or homicide can take place without the knowledge of the victim e.g. by mixing in some food.

The answer to both the situations are no. This is because if homicidal ingestion with the knowledge of victim were forced upon, there would be marks of injuries seen near the mouth and face as the quantity ingested was large and the victim was healthy enough to show resistance. If homicidal ingestion without the knowledge of victim is considered i.e by mixing powdered tablets of Aluminum Phosphide in food, was to be attempted, the victim would have instantaneously come to known and would refuse to eat that food, because Aluminum Phosphide especially when mixed in large dose, emits a foul smell when it comes in contact with liquid and the taste becomes very unpalatable."

### **No mark of struggle**

That during the course of investigation all efforts were made to ascertain the source of seminal stain of an unknown person in the panty of Ms Shilpi Jain which was seized from the Maruti Car in which the dead bodies were found. However, in spite of best efforts the source of the said seminal stain besides that of Gautam could not be established. No evidence of murder of the two deceased also came to light during the course of investigation. The seminal stains of the unknown person was detected in the panty of deceased Shilpi Jain but not on her body which shows that the seminal stains were of earlier origin and there are no marks of struggle. The scientific evidence and the sequence of events clearly indicate that it is case of suicidal pact and the death was due to Aluminum Phosphide Poison. Even though investigation has indicated that it is a case of suicide, this final report u/s 173 Cr PC is filed before this Hon'ble court.

It is prayed that this report may kindly be taken on record and the case may be allowed to be closed.

(P.L.MEENA)

DY. SUPDT. OF POLICE

CBI/SIC-IV/NEW DEL;HI

(These are extracts from the final report in the Shilpi-Gautam case submitted by the CBI to a Special Court in Patna on August 5, 2003. Sub-headings are not part of the original document)