

'RIGHT TO TORTURE'

## **Untruth Serum**

**P Chandra Sekharan**

[Supreme Court has ruled that forcible use of tools like narco-analysis, polygraph tests and Brain Electrical Activation Profile (BEAP) is illegal, inhuman and degrading. Forensic science experts have pointed out that use of drugging for investigations doesn't necessarily extract truth out of one's system. On the contrary, it is yesteryear's barbarism and today's truth detecting terrorism marketed by some self-centered pseudo-scientists, writes P Chandra Sekharan.]

Interrogation is an important aspect of criminal investigation. It is an art to be mastered through study and experience. It plays major role in investigation whenever there is little or no physical evidence. Police and other investigators depend on interrogation as a principal means of determining facts and resolving issues. It is a well-accepted norm in civilized nations that for both ethical and pragmatic reasons no interrogator may take upon himself or herself the unilateral responsibility for using coercive methods. Concealing from the interrogator's superiors intent to resort to coercion, or its unapproved employment, does not protect them. It places them, in unconsidered jeopardy.

Reliance on interrogation, however, involves certain problems: ascertaining when a suspect or witness is telling the truth, evaluating memory, allowing for the physical and mental condition of a witness or suspect, and understanding the problems created by an individual's perspective. Interrogation methods and equipment have evolved in response to these problem areas. It is true that the psychological, psychophysical, and physical sciences have played vital roles in police interrogation techniques. But unfortunately this eventually led to many pseudoscientific truth-detecting techniques as well.

### **COERCIVE TECHNIQUES**

Coercive procedures are designed not only to exploit the resistant source's internal conflicts and induce him to wrestle with himself but also to bring a superior outside force to bear upon the subject's resistance. The following are the principal coercive techniques of interrogation: arrest, detention, deprivation of sensory stimuli through solitary confinement or similar methods, threats and fear, debility, pain, heightened suggestibility and hypnosis, narcosis, and induced regression.

If one looks at the history of police investigation, physical coercion (third degree practice) has been preferred to painstaking and time-consuming inquiry in the belief that direct methods produce quick results. Sir James Stephens, writing in 1883, rationalizes a grisly example of "third degree" practices by the police of India: "It is far pleasanter to sit comfortably in the shade rubbing red pepper, in a poor devil's eyes than to go about in the sun hunting up evidence."

### **NARCOANALYSIS**

More recently, police officials in the country are lured by one or two pseudoscientists to the practice of narcoanalysis to extract confessions from accused persons. The police are misguided to think that narcoanalysis is a boon to the police to make breakthroughs. This technique, as claimed by the police, is neither modern nor an internationally accepted one having its origin in the early 1920s. Drugs are supposed to relax the individual's defenses to the extent that he unknowingly reveals truths he has been trying to conceal. This investigative technique cannot be considered as humanitarian and as an alternative to physical torture, but could be dubbed as "psychological third degree", raising serious questions of individual rights and liberties. The civilized nations abhor the use of chemical agents in the guise of truth serum "to make people do things against their will".

### **TRUTH SERUM**

What is truth serum? "In vino veritas" ("in wine there is truth") observed Gaius Plinius Secundus, (better known as Pliny the Elder), the Roman nobleman, scientist, natural philosopher and historian during the first century. In fact, alcohol given as intravenous ethanol, was an early form of truth serum. But the fascination for truth-eliciting drugs began in 1916 when an obstetrician named Robert Ernest House, practicing in a town outside Dallas named Ferris, saw a strange event during a home delivery.

The woman in labour was in a state of "twilight sleep" induced by scopolamine, a compound derived from the henbane plant that blocks the action of the neurotransmitter acetylcholine. House had asked her husband for a scale to weigh the newborn. The man looked for it and returned to the bedroom saying he could not find it —whereupon his wife, still under the anesthetic, told him exactly where it was. House became convinced that scopolamine could make anyone answer a question truthfully, and he went on to promote its forensic use.

The phrase "truth serum" appeared first in a news report of the experiments conducted on prisoners by Robert House, in the Los Angeles Record, sometime in 1922. Robert House himself resisted the usage of the term for a while but eventually came to employ it regularly himself. Since then police departments used it — and in a few cases judges permitted it — through the 1920s and 1930s. Other drugs were also tried, most famously the barbiturates and Pentothal Sodium had become the drug of choice in interrogations. But by the 1950s, most scientists had declared the very notion of truth serums invalid, and most courts had ruled testimony gained through their use inadmissible.

The terminology "truth serum" is itself a twofold misnomer. Neither the drugs used in this technique are sera nor do they necessarily bring forth the probative truth. It is the media which continues to exploit the appeal of the term as it provides an exceedingly durable theme for the press and popular literature.

### **PRACTICE OF NARCOANALYSIS**

The use of so-called "truth" drugs in interrogation is similar to the accepted psychiatric practice of narcoanalysis, which is nothing but psychotherapy conducted while the patient is in a 'sleep-like state' induced by barbiturates or other drugs, especially as a means of releasing repressed feelings, thoughts, or

memories. Its use in psychiatric practice is restricted to circumstances when there is a compelling, immediate need for a patient's responses. But the difference in the procedures adopted by the investigator lies in a totally different objective. The police investigator is concerned with empirical truth that may be used against the suspect, and therefore almost solely with probative truth: the usefulness of the suspect's revelations depends ultimately on their acceptance in evidence by a court of law.

The psychiatrist, on the other hand, using the same 'truth-drugs' in diagnosis and treatment of the mentally ill, is primarily concerned with psychological truth or psychological reality rather than empirical fact. A patient's aberrations are reality for him at the time they occur, and an accurate account of these fantasies and delusions, can be the key to recovery. According to psychiatrists 'they cannot be considered as reliable recollection of past events'.

### **EXPERIMENTAL STUDIES**

The clinical and experimental studies conducted by many researchers have concluded that there is no such magic brew as the popular notion of truth serum. The barbiturates, by disrupting defensive patterns, may sometimes be helpful in interrogation, but even under the best conditions they will elicit an output contaminated by deception, fantasy, garbled speech, etc. A major vulnerability they produce in the subject is a tendency to believe he has revealed more than he has. Studies and reports dealing with the validity of material extracted from reluctant informants indicate that there is no drug which can force every informant to report all the information he has. Not only may the inveterate criminal psychopath lie under the influence of drugs which have been tested, but the relatively normal and well-adjusted individual may also successfully disguise factual data.

Several patients revealed fantasies, fears, and delusions approaching delirium, much of which could readily be distinguished from reality. But sometimes there was no way for the examiner to distinguish truth from fantasy except by reference to other sources. One subject claimed to have a child that did not exist, another threatened to kill on sight a stepfather who had been dead a year, and yet another confessed to participating in a robbery when in fact he had only purchased goods from the participants. Recently a Bangalore journalist, who was voluntarily undergoing a narco test, revealed that he loved Shah Rukh Khan's mum the most while his recorded answer before he took the test was he loved his mother.

Testimony concerning dates and specific places was untrustworthy and often contradictory because of the patient's loss of time-sense. His veracity in citing names and events proved questionable. Because of his confusion about actual events and what he thought or feared had happened, the patient at times managed to conceal the truth unintentionally. As the subject revived, he would become aware that he was being questioned about his secrets and, depending upon his personality, his fear of discovery, or the degree of his disillusionment with the doctor, grow negativistic, hostile, or physically aggressive. Drugs disrupt established thought patterns, including the will to resist, but they do so indiscriminately and thus also interfere with the patterns of substantive information the interrogator seeks. Even under the conditions most favourable

for the interrogator, output will be contaminated by fantasy, distortion, and untruth. Because of these world-wide opinions, narcoanalysis for interrogation has been dispensed with long back.

As cited by Anirudh K Kala, Inbau, the then professor of law at Northwestern University, who had had considerable experience in observing or participating in 'truth serum' tests, is of the opinion that such tests are occasionally effective on persons who, if they had been properly interrogated, would have disclosed the truth anyway. The person who is determined to lie will usually be able to continue the deception even under the effects of the drug. On the other hand, the person who is likely to confess will probably do so as a result of skillful police interrogation and it will not be necessary to use drugs.

### **SIDE EFFECTS OF PENTOTHAL**

The life-threatening adverse side effects of Pentothal are circulatory depression, respiratory depression with apnoea and anaphylaxis. Its effects on CNS may produce headache, retrograde amnesia, emergence delirium, prolonged somnolence and recovery, besides several other side effects.

Sodium thiopental is a depressant and is sometimes used during interrogations not to cause pain (in fact, it may have just the opposite effect) but to get the person being interrogated to talk. It is not true that sodium pentothal does not cause pain. It can be irritating and painful if accidentally injected into tissues. Extravascular or intra-arterial injection would indeed cause pain. (Please refer Stephen Raftery, Bristol Royal Infirmary, UK., Pharmacology Issue 2 (1992) Article 8 : Page 1 of 1).

### **THE INDIAN SCENARIO**

It was sometime during the year 2000, narcoanalysis was given a rebirth in India when the Bangalore Forensic Science Laboratory announced the availability of a four-in-one package tests for the investigating police officers. From then on the Indian police were lured to these tests and they began considering 'Pentothal Sodium' as the cornucopia for all their unsolved crimes. They believe in the fits and starts of the drug rather than their wits to intelligently interrogate. The Indian judiciary, barring the Supreme Court, appears to have given its tacit approval to adopt pseudoscientific techniques in crime investigation. The Fourth Estate looks at the truth drug with the same excitement it created in 1922 when the Texas obstetrician, Robert House first termed the drug as 'truth serum'. The Indian psychiatry is watching the fun with caution. The Indian Neuroscientists (medicos) are amused to see the misuse of Brain Sciences by the non-medicos.

### **THE FOUR-IN-ONE PACKAGE**

The package includes the following four tests in that order a) psychological profile b) polygraph test c) brain fingerprinting test and d) narcoanalysis. All the four tests are conducted by the same expert (social psychologist) one after the other on the pretext that the earlier test suggests confirmation by the next. The tragedy is that the final confirmation is made by Narcoanalysis, the earliest to be thrown out. The intention is clear. The report on narcoanalysis will only be in the form of verbal statements by the accused while the reports on the other tests are

simply based on electrical responses. The architect of these tests is also not bothered about the possibility of the result of one test prejudicing the findings in the next which is again against principles of scientific investigation and ethics.

### **THE OTHER TESTS**

A. Polygraph Test : The most dramatic gains in interrogation technology, when once narco test was discarded, have come through the polygraph, or so-called lie detector. The polygraph monitors and records selected body changes that are affected by a person's emotional condition. The recorded changes are then studied, analyzed, and correlated in respect to specific questions or other stimuli.

Again, the name "polygraph test" is itself misleading. The word "test" indicates an 'objective process of evaluation' based on facts; similar to a DNA or a blood test. Results obtained from a polygraph test are much less credible, since the device measures the body's reaction to two different types of questions. The two different types of questions are known as relevant and control questions. The examiner must compare responses from relevant questions to those of control questions in order to form an opinion. The dirty little secret behind the polygraph is that the "test" depends on trickery, not science. Perversely, the "test" is inherently biased against the truthful.

'Absolutely there is no difference between a polygraphist who manipulates examinations, and a law enforcement officer who plants contraband on a suspect. In both cases, evidence is being manufactured. The only difference is the law enforcement officer has committed a crime, and the polygraphist just made money'.

### **B. BRAIN FINGERPRINTING**

The technique developed in the early nineteen nineties by Lawrence A Farewell, a former research associate in psychology in the Department of Psychiatry of Harvard Medical School, is claimed to be an alternative to polygraph test. In using the technology, a suspect is shown carefully selected words, phrases or images on a computer screen. They are things like a photo of a murder weapon or the model of car used in a crime. It is claimed that these things would only be recognized by the person who committed the crime.

Sensors on a headband register the subject's EEG, or brain wave responses to the computer images. The EEG is fed through an amplifier and into a computer that uses proprietary software to display and interpret the brain waves. Unlike polygraph testing, it does not attempt to determine whether or not a subject is telling the truth. Rather, it attempts to determine whether the subject's brain has a record of relevant words, phrases, or pictures.

### **FARWELL'S VISIT TO INDIA**

This writer, had an opportunity to expose the fallacy behind Farwell's brain fingerprinting technique when Lawrence Farwell visited Hyderabad on March 27, 2004 whence the Andhra Pradesh Forensic Science Laboratory had organized a symposium on 'Truth detecting techniques'. After Farwell made his presentation he was confronted with the comment that his technique would not differentiate the brain wave response exhibited by the perpetrator of a crime from that

exhibited by the others who have knowledge about the crime. Farwell concurred with the observation. Farwell's team brought with them more than a dozen equipment to be marketed in India. The Director General of Police, Andhra Pradesh, Mr Sukumaran had on the spot cancelled the orders earlier placed for the purchase of a unit for Andhra Pradesh Forensic Science Laboratory from Farwell and Farwell had to go back to America taking back all the units he brought to India for sale.

Farwell's Brain Fingerprinting : *The Des Moines Register*, a newspaper dated September 06, 2004 has published a very interesting story about Farwell's company having swindled the taxpayers of Iowa out of over \$100,000 on the pretext of Brain Fingerprinting research. On the outskirts of Fairfield, alongside a gravel- driveway marked with a sign that reads "Hermit Haven," sits the National Data Center and Regional Operations Center for Brain Fingerprinting Laboratories Inc. The centers consist of a small, rented office and an empty laboratory. A few computers with archived experiment data are stashed in the basement behind steel doors, but no workers are there to use them. "They moved to Seattle," explains a businessman in a neighboring office.

In the months before that move, Brain Fingerprinting Laboratories collected \$125,000 in grants and loans from the Iowa Department of Economic Development. However, a lawyer in the Iowa attorney general's office has said Farwell's so-called brain fingerprinter is no more effective than "a pasta strainer with a chin strap." Another lawyer in the attorney general's office called the state's investment a waste of taxpayer money. A third has said the company's claims are "nonsense." There are no takers for brain fingerprinting in America itself.

### **BRAIN FINGERPRINTING IN INDIA**

When such is the real position of brain fingerprinting, two forensic science laboratories in India (The Gujarat lab also joined the bandwagon now) moved fast to apply this technique in actual cases. (Bangalore Lab claims that they have already completed 700 cases of brain mapping and 300 cases of narcoanalysis.) Indian psychologists claim that they have brought out the hidden secrets of the brain of the accused.

The P300 brain wave response is just a waveform with a single spike which is very similar in the suspect as well as the other witnesses. Unless experts find out a distinct characteristic in the brainwave response of the perpetrator which is totally different from the responses of other witnesses, the information derived from brainwave response of an accused will have no meaning. Nobody has yet found any publication about original research, if any carried out in this direction by brain wave specialists in peer-reviewed scientific journals. There is a wild rumour that these people are simply copying Farwell's patented technique without paying royalty to him and they will certainly get into problems. First they must come out with their own findings, if any, which are different from that of Farwell, and satisfy the 'falsifiability criterion', before applying the technique in actual cases. 'Brain fingerprinting' as it is today, is little supported by forensic

evidence or experience and it is no better than its cousin 'lie-detector'. If narcoanalysis is a primitive technique, brain wave test is a premature one.

### **STRONG SUPPORT FROM DFS, MHA**

Meanwhile, the Directorate of Forensic Sciences functioning under the Ministry of Home Affairs (DFS, MHA) had officially released a manual, prescribing the procedure for the conduct of narcoanalysis. Yes! A manual was released in 2005 by the DFS, which proclaims "Promoting Good Practices and Standards" for a technique not practiced until this day in any of the three Central Forensic Science Laboratories directly under its own control; a technique considered to be a barbaric practice and abandoned by all civilized countries; a technique not practiced by any Forensic Science Laboratory anywhere in the world; a technique, since its inception in 1922 was practiced only in hospitals with the help of medical men, psychiatrist and anesthetist until it was abandoned a few decades ago.

It is only the State Forensic Science Laboratory Bangalore that had suddenly found a fancy for this test during the past few years. But the Laboratory Procedure Manual-Forensic Narcoanalysis issued under the banner of Ministry of Home Affairs, Government of India, carries disinformation as if many laboratories in India are doing this test. It is said in the preface of the manual that "Forensic Science Laboratories now have started playing active role in providing scientific aids to investigators by examining suspects under the "state of trance" achieved by employing Narcoanalysis technique". The fact is that no laboratory other than the Bangalore one in India conducts this test. No big procedure or technology is involved in this test. The write-up, resembling the advocacy of a private company to promote its product, makes tall claims ignoring all negative aspects and risk factors involved in the test. The manual also advises that the revelations during narcoanalysis can be verified by polygraphy and brain fingerprinting, the two pseudoscientific techniques. Incidentally, the DFS has also released a manual for brain fingerprinting.

### **ETHICAL CONSIDERATIONS**

For ethical reasons the psychiatrist is advised against performing narco-analysis when the examination is requested as an aid to criminal investigation. World Medical Association recently revised its Tokyo declaration on this subject and now states inter-alia :

The physician shall not countenance, condone or participate in the practice of torture or other forms of cruel, inhuman or degrading procedures, whatever the offence of which the victim of such procedures is suspected, accused or guilty and whatever the victim's beliefs or motives and in all situations including armed conflict and civil strife.

The physician shall not provide any premises, instruments, substance or knowledge to facilitate the practice of torture or other forms or cruel, inhuman or degrading treatment or to diminish the ability of the victim to resist such treatment.

Medical Council of India has recently amended its official code of medical ethics by adding, "The physician shall not aid or abet torture nor shall he be a party to either infliction of mental or physical trauma or concealment of torture inflicted by some other person or agency in clear violation of human rights".

Anirudh Kala says, "It is shocking that such a gigantic fraud with so many important ramifications is being perpetrated on the nation. I suggest that a group of scientists and intelligentsia be formed so that a concerted effort can be made to expose the absurdity going on".

### **CONCLUSION**

The police are a disciplined force trained to uphold the law and to enable democratic institutions to function lawfully. Police powers are confined by the provisions of the Constitution, the Police Act, the Criminal Procedure Code, the Evidence Act and many other local and special laws which impose restrictions on the scope and method of exercise of that power. Forensic scientists should inspire the police with their scientific methods not to violate the norms. They will be accused of conspiring with them if they are a party in using the above psychological coercive methods.

Courts have powers to extract accountability from the police in case of violations of human rights in exercising their functions. Courts should therefore be posted with a detailed knowledge about these techniques. The recent decision of the Bombay High Court in a case that employing certain physical tests involving minimum bodily harm such as narcoanalysis, lie detector tests and brain fingerprinting did not violate the rights of the accused persons guaranteed by Article 20(3) of the Constitution has come probably due to the fact that they have not been posted with full information about these techniques. Certainly this will lead to a systematic violation of human rights through the use of coercive pseudo scientific practices under the label of proven and recognized forensic scientific techniques.

All the more it is necessary that the media, the Lok Ayuktas, the Human Rights Commissions, the superiors within the police organizations should take a serious view about the use of these techniques in the guise of interrogation and guide the Home Ministries to evolve a common code in this regard.

In the case of *Daubert v. Merrell-Dow Pharmaceutical*, the Supreme Court of America unanimously decided on June 28, 1993, that 'falsifiability criterion' should be the arbiter of what kind of scientific evidence will be admissible. According to this criterion Freudian psychoanalyst concept is clearly unscientific. Many psychologists themselves have little or no understanding of 'falsifiability criterion' and this may be even truer of psychiatrist and social workers.

The expert witness of psychologists using hypnosis, narcoanalysis, theories of repression, recovered memories, deviant behaviour, dissociation and multiple personality disorder, as well as others is no longer acceptable. And such expert witness can be questioned on the grounds of lack of reliability and testability. In truth, narcoanalysis is yesteryear's barbarism and today's truth detecting terrorism marketed by some self-centered pseudoscientists. □□□

**REFERENCES :**

1. Kala AK, Of ethically compromising positions and blatant lies about truth serum, *Indian Journal of Psychiatry*, 2007, May12, 49,6-9
  2. McDonald J M, Narcoanalysis and Criminal Law, *American J Psychiatry* 1954, 111 : 283-8
  3. Stephen, Sir James, *History of Criminal law*. Norton WW. New York; 1952. p. 1883.
  4. Guttmacher, Weihofen. Psychiatry and the law. Cited from: Inbau FG. *Self incrimination*. Thomas CC. Springfield; 1950. p. 69.
  5. Mayank Tewari. First brain mapping lab in Bangalore. *Sunday Hindustan Times*, Mumbai September 17, 2006, page 1.
  6. Stephen Raftery, Bristol Royal Infirmary, UK., *Pharmacology Issue 2 (1992) Article 8: Page 1 of 1*.
- [source : <http://www.countercurrents.org/chandra060510.htm>]