

## CONTROVERSY

# Misconceptions about narco analysis

**BANNUR MUTHAI MOHAN**

Office of the Director, Forensic Science Laboratories, Madiwala, Bangalore INDIA e-mail: mohandfsl@yahoo.co.in

The writer of the editorial titled 'Medical professionals and interrogation: lies about finding the truth' (1) has conveyed a series of misconceptions about the technologies referred to in the discussion. Such an article should have been properly evaluated for its suitability for publication. The article has done more damage than good because of its failure to recognise the needs of the criminal justice system and its current legal position. Here are my comments on different paragraphs in the article:

**Paragraph 1:** The very first sentence is incorrect. It is not clear which barbiturate the author is referring to as the "truth serum". In the past, some barbiturates were used as "truth" drugs in the diagnosis and treatment of the mentally ill. Many of these, such as scopolamine, sodium amytal (ano barbital) and seconbarbital, were subsequently banned. An understanding of "truth" drugs, their characteristic actions, and their positive and negative potential for eliciting useful information is fundamental; the author seems to have lost sight of this. It is incorrect to say that the "truth serum" produces some kind of "magic". Medical professionals are not involved in "lie detection" and "brain mapping" tests but their involvement is essential for narco analysis.

**Paragraph 2:** It is true that the number of research publications on lie detection has tripled during 2002-2006. But no material has been produced that can be described as randomised controlled trials. The US permits the use of the polygraph as a tool to minimise the potential for disclosure of classified information. The US department of defence is interested in increasing the use of polygraphs for security and counter intelligence (2,3,4). In addition to recent developments in the field of lie detection, the expertise of a clinical psychologist is an important factor for its acceptance as evidence before courts of law court. This has already happened in India (5).

**Paragraph 5:** The US Supreme Court has laid down the law and has accepted the use of the "truth serum" as an investigative technique (6). During the congressional investigation of the September 11 terrorist attack, important confessions were made by the prime accused during a sodium pentathol-aided interrogation. Pursuant to the revelations made, "The US administration privately believes that the Supreme Court implicitly approved using such drugs in matters where public

safety is at risk." (7) The US Supreme Court also says that "in cases of special government need beyond the normal requirements of law enforcement... a warranty requirement and even the requirements of suspicion may be dispensed with. The pin prick involved in delivering the truth serum [sodium pentathol] is likely to be viewed as minimal intrusion involving virtually no risk, trauma or pain, and given the special government need to fight terrorism might be justified without probable cause or a warrant (8)."

**Paragraph 6:** The Forensic Science Laboratory (FSL), Bangalore, has been conducting lie detection tests since 1999. The first narco analysis was done there in 2001 on an individual connected with offences committed by Veerappan. The author's data are incorrect.

**Paragraph 7:** There is no basis for the author's statement that drug-aided interrogation techniques, which are scientific and humane, are "short of torture". A clear understanding of the characteristics of the drug, its pathway of action, the technique of controlled depth of anaesthesia (9,10,11, 12), and the psychological techniques of handling a person in a "state of trance" will eliminate the ingredients constituting "torture".

**Paragraph 8:** The author may be aware that "third degree" methods adopted by investigating officers have failed to yield useful information in most cases and this is a major cause of the low rate of convictions. Such methods in fact make the individuals more hardened and disinclined to reveal any information, particularly in cases of organised or terrorist crimes. The author is not justified in using such words as "torturer" and such use is in bad taste.

**Paragraph 9:** Lie detection and narco analysis are based on entirely different principles. The former is based on the emanation of physiological /autonomic responses while answering the questions framed by the clinical psychologist. The latter is based on how sodium pentathol handles GABA (gamma amino butyric acid), a neuro transmitter inhibitor. The inhibitory character of an individual is controlled by the depth of the anaesthesia and by psychological techniques specific to dealing with an individual in a "trance". A clinical psychologist may evaluate the appropriateness and efficacy of eliciting information in this manner. All the parameters required for narco analysis and the degree of conscious awareness are constantly measured and monitored. Quantitative data are now available to determine the concentration of the drug administered at any

point of time during the procedure and evaluate the level of confidence one can have about the outcome of such procedures. A case where the use of the machine led to wrong conclusions cannot be the basis for dismissing the technology.

**Paragraph 10:** The legal position about the constitutional rights of individuals against self-incrimination while subject to narco analysis has become clear after a number of high court decisions in India (13,14,15,16). The principle of “substantive due process” is never violated in doing narco analysis because permission from the jurisdictional court must be obtained prior to narco analysis in each and every case. The recent amendment (2005) to section 53 of the Cr.PC recognises the importance of these scientific tests.

**Paragraphs 11,12,13,14:** As long as the principles underlying the technologies are recognised as scientific, no parallels can be drawn with “torture”. The FSL, Bangalore, has subjected more than 300 persons connected with a variety of crimes – involving organised crime by terrorist outfits, cyber crimes and other heinous crimes – from across the country, to such tests. The success rate has been 96-97 per cent as evaluated from the feedback received from investigating agencies and others. About 25 per cent of the total number of individuals subjected to narco analysis turned out to be “innocents”. Therefore, the “rights of innocent individuals” stand established (14,15,16). When the public and human rights activists protest that investigating agencies adopt “third degree” methods to extract information from the accused, it is time the agencies took recourse to the scientific methods of investigation described above.

Investigations into the July 11 train blasts in Mumbai and the subsequent blasts in Malegaon were successful only because of the revelations made by individuals during narco analysis. Narco analysis has taken the place of not only proactive forensics but also of preventive forensics, because it has helped the administration take steps to prevent further planned blasts in Malegaon and Karnataka. Plans for these are being successfully intercepted only on the basis of revelations made by the accused during narco analysis.

The number of persons subjected to narco analysis is low when compared to the total number of crimes reported. This negligible percentage of individuals cannot hold society to ransom. The individual’s constitutional right cannot override the State’s interest. This view has been upheld in the various high

court rulings cited in the references.

**Paragraph 15:** How can the author say the police in India have started violating norms by airing videotapes of narco analysis? Once the investigating officer files the charge sheet, it becomes a public document.

**Paragraphs 16,17,18,19:** The team that conducts narco analysis consists of one anaesthetist, one physician and one clinical/ forensic psychologist. The responsibility of each expert in the team is well defined. The physician certifies the fitness of the person before and after narco analysis, the anaesthetist modulates the depth of anaesthesia required depending upon the quantum of information to be obtained and monitors the various stages of anaesthesia. Only the clinical or forensic psychologist interacts with the individual who is a “trance” and gives reports along with videotapes to the courts on behalf of the team. No medical professional in the team is involved in interrogating the individual. This task is the exclusive domain of the clinical/forensic psychologist. There is therefore no violation of ethics by medical professionals.

#### References

1. Jesani A. Medical professionals and interrogation: lies about finding the truth. *Indian J Med Ethics* 2006 Oct-Dec; 3: 116-117.
2. Office of the assistant secretary of defence (command, control, communications and intelligence). *Annual Polygraph Report to Congress, Fiscal Year 2002*. Washington, DC; US department of defence. [cited 2006 Nov 20]. Available from: <http://www.fas.org/spp/othergov/polygraph/dod-2002.html>
3. Department of Energy, Polygraph Examination Regulators, 10C.F.R 709 (2003): 60 Fed.Reg 17,886, April (2003).
4. Fact File: A compendium of DAPAR Programs, The Defense Advance Research Projects Agency, August (2003).
5. ILR (2002) KAR 2983.
6. Solomon v. US, 753 F.2d.1522, (9th Cir.1985), 1985.
7. Posner Gerald. *Why America slept: the failure to prevent 9/11*. Random House: 2003.
8. Indianapolis v. Edmond, 531 U.S.32 (2000).
9. Bajaj Pramila. *Drugs in clinical anaesthesia*. 1st edition. Medisurge Publications: 2003.
10. Vickers M D, Schnieden H, Wood-Smith FG. *Drugs in anaesthetic practice*. 6<sup>th</sup> edition. London; Butterworths: 1985.
11. Mycek Mary J, Harvey Richard A, Champe Pamela C. *Pharmacology*. 2nd edition. Lipincott, Williams & Wilkins: 2000.
12. Collins VJ. *Principles of anaesthesiology: general and regional anaesthesia*. 3<sup>rd</sup> edition. Philadelphia, USA; Lea-Febiger: 1993.
13. Order of Hon’ble High Court of Karnataka in CRL petition no 1964/2000 September (2004).
14. ALL MR (Cri) 1704, (2004) [Bombay High Court].
15. Cri. L. J. 2401 (2006) [Madras High Court].
16. ALL MR (Cri) 74, (2005) [Orissa High Court].