



NARCO-ANALYSIS IN INDIA: LEGAL, ETHICAL AND INVESTIGATIVE IMPLICATIONS

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ABSTRACT

This article presents a detailed exploration of the use of narco-analysis in India through multifaceted lenses, encompassing legal, scientific, ethical, and investigative perspectives. It begins by outlining the historical evolution and forensic promise of narco-analysis, a technique that employs drugs like sodium pentothal to lower inhibitions and elicit concealed information from subjects. Anchored in constitutional mandates, the study examines the profound challenges posed by narco-analysis to fundamental rights, particularly under Article 20(3) (protection against self-incrimination) and Article 21 (right to life and personal liberty). Drawing on landmark Indian cases such as Selvi v. State of Karnataka (2010)¹ Amlesh Kumar v. State of Bihar (2025),² and various High Court rulings, the article illustrates judicial resistance to any involuntary or improperly administered narco-analysis. It further juxtaposes Indian practices with international forensic standards, referencing renowned U.S. cases like Brown v. Mississippi (1936)³ to underscore the global ethical debates on coercive interrogation techniques. The discussion also critically assesses the reliability, scientific underpinnings, and potential psychological impacts of the procedure while offering policy recommendations to ensure rigorous judicial oversight and the development of non-invasive alternatives. Ultimately, the article calls for a balanced integration of forensic innovation and constitutional safeguards, advocating for continuous interdisciplinary research and transparent public discourse to shape a just and ethical criminal justice system.

Keywords: Narco-Analysis, Forensic Science, Self-Incrimination, Constitutional Rights, Judicial Oversight.

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¹ Selvi v. State of Karnataka, (2010) 7 S.C.C. 263 (India)

² Amlesh Kumar v. State of Bihar, (2025) S.C. 984 (India)

³ Brown v. Mississippi, 297 U.S. 278 (1936)

INTRODUCTION: UNVEILING THE TRUTH BEHIND THE VEIL OF CHEMISTRY

In the modern age of forensic innovation, the legal system often walks a razor's edge—balancing truth-seeking with the preservation of individual liberties. Touted by some as a breakthrough in cracking complex criminal cases and dismissed by others as a pseudoscientific intrusion into personal autonomy, narco-analysis continues to stir intense academic, judicial, and public debates in India.

The term “narco-analysis” is derived from the Greek word *narke* (meaning anaesthesia or stupor) and refers to a method of psycho-interrogation wherein a person is injected with psychotropic drugs—most commonly sodium pentothal⁴ or scopolamine—to reduce their inhibitions and potentially reveal suppressed information. Proponents argue that the procedure can bypass conscious attempts at deception, while critics contend it undermines constitutional protections, especially Article 20(3)⁵ (protection against self-incrimination) and Article 21⁶ (right to life and personal liberty).

Historically, the roots of narco-analysis trace back to early 20th-century psychiatric studies in the United States. It was later introduced into criminal investigations, particularly during the Cold War era, where intelligence agencies used it to extract information from espionage suspects. In India, the technique garnered attention in the early 2000s, especially during high-profile cases such as the Nithari killings, the 2008 Bangalore serial blasts, and the Aarushi Talwar-Hemraj double murder case. While initially regarded as an investigatory miracle, the technique's credibility and legality have since been placed under serious scrutiny.

The Indian judiciary, most notably in *Selvi v. State of Karnataka* (2010), firmly drew a line in the sand by ruling that the forcible administration of narco-analysis is unconstitutional. The Supreme Court clarified that even voluntary tests must be approached with extreme caution and judicial oversight. In 2025, the Court reiterated this view by declaring that narco-analysis is not an indefeasible right of the accused, cementing its status as a legally restricted investigatory tool.

⁴ Sodium Pentothal, also known as Sodium Thiopental, is a rapid-onset, short-acting [barbiturate](#) anesthetic

⁵ Article 20, clause (3) of the Indian Constitution, 1950

⁶ Article 21 of the Indian Constitution, 1950

This article seeks to explore narco-analysis in India through scientific, legal, ethical, and global lenses. It will examine both its allure as a truth-seeking tool and its peril as a potential threat to human dignity, mental privacy, and the principles of natural justice.

SCIENTIFIC AND PSYCHOLOGICAL BASIS OF NARCO-ANALYSIS

Understanding the nature of narco-analysis requires a multidisciplinary lens, incorporating pharmacology, neuropsychology, and forensic science,⁷ and law. The very idea of chemically accessing “truth” is both scientifically intriguing and ethically contentious.

The Mechanism of Action: The procedure involves intravenous administration of barbiturates, such as sodium pentothal or thiopental, which act as central nervous system depressants. These substances reduce the brain’s activity, especially in regions responsible for cognitive control, critical thinking, and conscious deception. Under their influence, a person may enter a hypnotic or semi-conscious state where inhibitions are weakened, potentially making them more susceptible to suggestion and more likely to disclose hidden information. However, the reliability of the results remains questionable. While lowered inhibitions may encourage talking, they do not guarantee factual accuracy. The subject may confabulate—that is, create false memories or blend imagination with memory. As a result, the veracity of the “confessions” under narco-analysis is often debatable.

Psychological Implications: From a psychological standpoint, narco-analysis interferes with executive brain functions, particularly those related to self-censorship, short-term memory, and reasoning. It effectively shifts the subject’s responses to an unfiltered, free-association style of thinking, which may lead to spontaneous but disconnected or incoherent replies. Prominent psychologists like Dr. N.G. Somasundaram, who worked on several narco cases in India, have noted that patients often react to the test differently. Some remain lucid, while others fall into deep hallucinations, emotional regressions, or fear-induced compliance. The unpredictability of such responses makes the tool psychologically unstable for legal dependency.

Limits of Scientific Validation: While Hollywood dramatisations often portray truth serums as omnipotent tools, the reality is far more complex. The American Psychological Association (APA) and the Indian Association of Clinical Psychologists (IACP) have both expressed scepticism regarding the accuracy and ethicality of narco-analysis. Studies have repeatedly

⁷ Forensic Science Laboratory (India), Standard Operating Procedures: Narco-Analysis Protocols (Internal Manual, 2018) (copy on file with author)

shown that no pharmacological method exists that compels reliable, consistent truth-telling. Moreover, subjects under chemical sedation may have impaired faculties and give incomplete, exaggerated, or entirely fabricated accounts. Such inconsistency compromises the foundational principles of justice, which rest on evidentiary integrity and rational legal analysis.

LEGAL AND CONSTITUTIONAL FRAMEWORK

Indian jurisprudence places a heavy emphasis on protecting individual rights, especially when police investigations and forensic methodologies come into play. Two key constitutional articles form the backbone of the debate on narco-analysis: Article 20(3), which protects against self-incrimination, and Article 21, guaranteeing the right to life and personal liberty.

Article 20(3): Protection Against Self-Incrimination: Article 20(3) is one of the most sacrosanct pillars of Indian criminal jurisprudence. It asserts that "no person accused of any offence shall be compelled to be a witness against himself."

Fundamental Principle: This protection is vital in a democratic setup—it safeguards an accused from any form of coercion that might force them to reveal potentially self-damaging evidence. Narco-analysis, by attempting to elicit unfiltered truth through chemical means, inherently challenges this protection.

Implications for Narco-Analysis: When a suspect is subjected, even under the semblance of voluntary consent, to a procedure that chemically alters cognitive control, it raises a red flag. The active role of the drug in diluting one's conscious self-censorship arguably leads to involuntary self-incrimination, thereby contravening the spirit of Article 20(3).

Article 21: Right to Life and Personal Liberty: Article 21 has been expansively interpreted by the Indian judiciary. Its protection isn't just confined to physical survival but also embraces the right to mental and personal integrity.

Mental Privacy and Autonomy: Narco-analysis encroaches on an individual's right to mental privacy—a dimension of personal liberty upheld under Article 21. When an individual's cognitive state is pharmacologically altered, it not only disrupts their ability to control their thoughts but can also lead to unpredictable physiological and psychological consequences.

Judicial Reservations: The Supreme Court has repeatedly stated that methods like narco-analysis, brain mapping, and polygraph tests,⁸ when employed without stringent safeguards, represent a form of “inquisition” that is incompatible with a modern, rights-respecting legal system. This interpretation insists that even tools designed to elicit truth must not disregard the dignity and fundamental liberties of the suspect.

Regulatory Role of Judicial Oversight: Apart from constitutional mandates, judicial oversight remains indispensable when applying forensic techniques. In practice, the courts have held that:

- Any application of narco-analysis must be preceded by clear, informed, and voluntary consent.
- Judicial authorisation is mandatory to ensure that the use of such methods does not devolve into coercive measures.
- Test findings must be corroborated by independent evidence before being considered in any substantive manner during trials.

EXTENDED CASE LAW ANALYSIS

The evolution of Indian case law has seen a myriad of judgments that underscore the delicate balance between effective investigation and constitutional fidelity. Let’s now review additional landmark cases and prescriptions that illustrate how courts have wrestled with the nuances of narco-analysis.

Selvi v. State of Karnataka (2010): While already a cornerstone in this debate, *Selvi v. State of Karnataka* continues to resonate: The Supreme Court declared that compulsory narco-analysis violates Article 20(3) and is tantamount to forced self-incrimination. Even where an accused volunteers for such tests, it must be done with judicial supervision to control and validate the process.

The judgment further mandated that any statement derived through such means cannot be accepted as the sole piece of evidence for conviction; it must only be used as a tool to aid

⁸ National Human Rights Commission (India), ‘Guidelines on Polygraph Test, Brain Mapping and Narco-Analysis’ (2010)

further investigation. This case laid the groundwork for subsequent challenges to narco-analysis in subsequent Indian courts.

Amlesh Kumar v. State of Bihar (2025): In this more recent ruling, the accused in this case contended that the mere proposal to subject him to narco-analysis during a bail hearing was an infringement of his legal rights. The Bihar High Court initially acquiesced, but the matter reached the Supreme Court for further clarification.

The Supreme Court reaffirmed that an accused has no absolute right to request or reject narco-analysis without proper judicial scrutiny. The decision stressed that despite any potential investigative benefits, the overarching constitutional safeguards regarding personal liberty and the right against self-incrimination must not be sidestepped. This case underscores the judiciary's insistence on the limits of forensic methodologies when pitted against constitutional rights.

Rojo George v. Deputy Superintendent of Police (2006):⁹ This Kerala High Court case brought forth important observations regarding consent: The petitioner argued that using narco-analysis without clear, voluntary consent was a clear violation of personal liberty. The Court held that any such test administered without credible proof of informed consent was not only unethical but constitutionally impermissible. The ruling emphasised that coerced participation in forensic tests directly undermines the integrity of the judicial process, as any confession or statement obtained may be tainted under the shadow of duress.

Dinesh Dalmia v. State (2006):¹⁰ In a case that involved financial fraud and complex investigative challenges, the Madras High Court permitted the use of narco-analysis as a supplemental investigative tool. However, it was emphatic that such test results could never serve as conclusive evidence. They must always be verified with corroborative evidence gathered through conventional investigative practices. The court directed that if narco-analysis is to be employed, its administration must strictly adhere to standardised medical and forensic protocols to ensure its outcomes are not misinterpreted or misused.

Nisha Priya Bhatia v. Union of India (2014):¹¹ This case from the Delhi High Court brought to light the use of narco-analysis in sensitive national security matters. The petitioner, a former

⁹ Rojo George v. Deputy Superintendent of Police, W.P. (Crl) No. 420 of 2006 (Kerala High Court)

¹⁰ Dinesh Dalmia v State 2006 SCC OnLine Mad 940, (2006) 4 CTC 385 (Madhya Pradesh High Court)

¹¹ Nisha Priya Bhatia v Union of India, 2014 SCC Online Del 3593 (Delhi High Court)

intelligence officer, was subjected to narco-analysis under circumstances that raised serious human rights concerns. The case addressed whether such forensic practices could be legally justified in cases involving national security. The court ruled decisively that even in the realm of national security, the rights of the individual must be safeguarded. The use of narco-analysis without clear-cut, unambiguous, and voluntary consent was deemed to be contrary to the constitutional mandate protecting individual dignity.

State of Gujarat v. Anirudh Singh (1997):¹² Although not directly about narco-analysis, this case is crucial for its discourse on the duty of citizens during investigations:

Here, the Supreme Court emphasised the civic responsibility to assist investigations. However, it simultaneously warned that the state's efforts to procure information must never overreach into realms that infringe on constitutional freedoms. This ruling is often cited to underline that while state interests in effective investigation are significant, they must always yield to the inviolable rights of the individual. Thus, even persuasive investigatory techniques like narco-analysis must be executed within rigid legal boundaries.

International Case Reference: Brown v. Mississippi (1936) – A Comparative Insight: To gain a broader understanding, it is instructive to examine how other jurisdictions approach similar issues:

In *Brown v. Mississippi*, the United States Supreme Court dealt with coerced confessions obtained through brutal police interrogation methods against the backdrop of racial injustice. The Court held that involuntary confessions, regardless of the investigative context, are inadmissible, drawing parallels to the automatic exclusion of coerced narco-analysis responses in India. Although the statutory frameworks differ, the underlying principle remains the same: involuntary measures thwart the essence of a fair trial and undermine the credibility of the judicial process.

SYNTHESIS OF CASE LAWS AND THEIR IMPACT ON FORENSIC METHODOLOGIES

The extended review of these cases reveals a universal thread: the judicial system, whether in India or internationally, is increasingly wary of forensic techniques that tamper with personal

¹² State of Gujarat v. Anirudh Singh, 1997(6) SCC 514

freedoms. Courts have consistently underscored that while the pursuit of truth is paramount, it must never violate the sanctity of constitutional rights.

Every decision, whether permitting or restricting narco-analysis, reinforces the broader legal doctrine that investigative expedience cannot override due process. Even in the face of public outcry or investigative pressure, the rights enshrined in Articles 20(3) and 21 must remain inviolable.

These cases have collectively influenced reforms in forensic science administration in India. They have prompted law enforcement to adopt more holistic approaches, ensuring that any investigative technique is buttressed by judicial oversight and corroborative evidence. Additionally, the international legacy of cases like *Brown v. Mississippi* serves as a cautionary tale, reminding courts around the world of the dangers of coercive interrogation techniques.

The ongoing dialogue between forensic experts, legal scholars, and human rights activists is likely to yield more nuanced judicial guidelines. In the evolving landscape of investigative technologies, there is a growing consensus that any new method must pass the rigorous tests of ethical acceptability and legal robustness before it can be integrated into mainstream criminal procedure.

POLICY RECOMMENDATIONS AND FUTURE DIRECTIONS

Strengthening Legal and Forensic Protocols: Recognising the limitations and dangers inherent in narco-analysis, several policy recommendations have emerged aimed at balancing investigative needs with constitutional rights:

Institutionalising Clear Medical Protocols: Implement a standardised regimen for how narco-analysis should be administered. This includes clear guidelines on dosage, duration, and the specific professional qualifications required of those administering the tests. Establishing a national guideline would minimise inconsistencies that currently plague the procedure.

Mandatory Pre-Test Judicial Authorisation: Reinforce the requirement for judicial oversight at all stages. A pre-test hearing should confirm that the accused's consent is truly voluntary and that there is no alternative investigative method available that is less intrusive. This judicial gatekeeping can help prevent misuse.

Certification of Forensic Experts: Introduce a certification program for forensic experts administering narco-analysis. Regular training sessions on the latest medical and interrogation techniques should be mandatory, ensuring that practices evolve with emerging scientific knowledge.

Development of an Independent Monitoring Committee: Create an oversight committee with representatives from the judiciary, medical ethics bodies, and civil society organisations. This body would periodically audit forensic practices and ensure that protocols are strictly adhered to, thereby promoting transparency and accountability.

Research and Development of Alternatives: Investing in research to develop alternative forensic techniques is crucial. Promising avenues include:

Neuroimaging and Brain Mapping: Advances in functional magnetic resonance imaging (fMRI) and electroencephalography (EEG) technology offer the prospect of mapping brain activity without invasive drugs. These techniques, while still experimental, may eventually offer more reliable patterns of cognitive response and memory recall while preserving the individual's autonomy.

Behavioural and Digital Forensics: Expanding behavioural science methodologies and integrating digital forensic tools can provide objective insights into criminal behaviour. For example, voice stress analysis or pattern recognition technology for fraudulent transactions can supplement traditional investigative methods, reducing the reliance on controversial practices.

Collaborative Academic Research: Encourage interdisciplinary research initiatives that bring together experts in forensic science, psychology, law, and ethics. Universities and research institutes could partner with government agencies to develop robust methodologies that meet evidentiary standards without compromising human rights.

Policy Reform for a Progressive Criminal Justice System: The need for comprehensive policy reform is evident in an era of rapidly evolving forensic science.

Legislative Review: The Law Commission of India,¹³ along with parliamentary committees, should consider revising existing laws on evidence in criminal proceedings. This can help integrate new forensic breakthroughs while ensuring that individual rights remain sacrosanct.

Public Discourse and Transparency: Fostering public discussion about invasive forensic methods, including narco-analysis, can help create pressure for reform. Transparency in how forensic evidence is obtained and used will reinforce public trust in the criminal justice system.

International Collaboration: Drawing on global best practices, India can collaborate with forensic experts from jurisdictions with strict evidentiary standards. Such international dialogues can lead to the adoption of innovative yet ethical forensic techniques that align with global human rights norms.

MEDIA PORTRAYAL AND PUBLIC DISCOURSE

The Role of Media in Shaping Public Perception: Media coverage of controversial forensic techniques has a profound impact on how the public perceives the legitimacy of law enforcement practices. In India, sensationalised reports on narco-analysis have sometimes inflated its perceived efficacy while downplaying its ethical and legal shortcomings.

Influence on Jury Trials and Public Opinion: News outlets often highlight dramatic revelations from narco-analysis tests, which can sway public opinion and contribute to biases in jury trials. This media narrative may inadvertently pressure law enforcement and judicial authorities to take a more permissive stance on invasive methods, contrary to constitutional safeguards.

Balanced Reporting: A growing number of investigative journalists and legal commentators are now advocating for balanced reporting that critically examines both the forensic value and the human rights implications of narco-analysis. Such balanced discourse can foster greater accountability and encourage policymakers to seek reform.

Academic and Legal Workshops: Public seminars and legal workshops are emerging as forums for both experts and laypersons to discuss the implications of forensic evidence. These platforms often bring together:

¹³ Law Commission of India, Report No 263: The Use of Forensic Evidence in Criminal Proceedings (2017)

- Forensic experts who explain the technical nuances of narco-analysis.
- Legal scholars discuss its alignment with constitutional provisions.
- Human rights advocates who stress the ethical dimensions and call for non-intrusive alternatives.

These dialogues play a vital role in informing ongoing legislative reforms and in educating the public about their rights concerning forensic investigations.

CONCLUSION

The expansive debate over narco-analysis in India stands as a testament to the delicate balance between forensic inquiry and the protection of individual rights. From its early days in Cold War espionage to its controversial application in modern criminal cases, narco-analysis has continually tested the boundaries of what should be permissible in the pursuit of truth. While its proponents tout the technique as a breakthrough tool for extracting hidden evidence, the judiciary and human rights advocates rightly highlight the risks it poses to personal liberty and constitutional sanctity.

The evolution of case law—from *Selvi v. State of Karnataka* to more recent decisions such as *Amlesh Kumar v. State of Bihar* and international parallels like *Brown v. Mississippi*—illustrates a consistent judicial commitment to safeguarding human dignity. These rulings serve as crucial safeguards that ensure investigative expedience does not overshadow the rights enshrined in Articles 20(3) and 21 of the Constitution.

Moreover, the emerging consensus among forensic experts, legal scholars, and policymakers is that any forensic tool must pass rigorous tests of scientific validation, ethical acceptability, and legal integrity. As technology advances, the promise of non-invasive and more reliable alternatives—such as neuroimaging and digital behavioural analysis—may render techniques like narco-analysis relics of a bygone era. Until then, maintaining strict protocols, independent oversight, and transparent reporting will be essential to ensure fairness in the administration of justice.

Ultimately, the challenge for India—and indeed, jurisdictions worldwide—lies in reconciling the pressing need to uncover the truth with the imperative to protect the fundamental rights of every individual. As we move forward, it is incumbent upon lawmakers, forensic practitioners, and society at large to strike a balance that does not compromise human dignity for the sake of

expediency. In the meantime, continued academic discourse, interdisciplinary research, and public debate will help shape a future for forensic science that is both innovative and deeply respectful of the values that underpin a just society.