

NARCO TEST IS THE BRAIN MAPPING BY PSYCHOTHERAPY TO GET INFORMATION OF TRUTH

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Article Received on 21/07/2024

Article Revised on 11/08/2024

Article Accepted on 01/09/2024

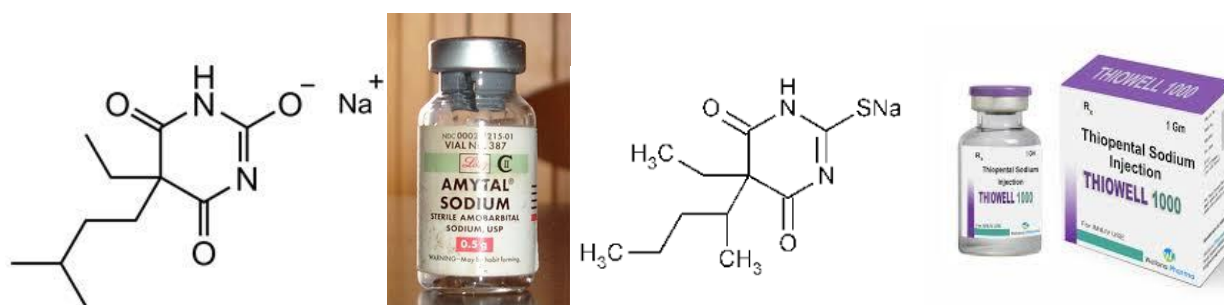
ABSTRACT

Truth serum" is a colloquial name for any of a range of psychoactive drugs used in an effort to obtain information from subjects who are unable or unwilling to provide it otherwise. Narco Analysis or Narco Test is an investigative type of tool which requires the injection of sodium pentothal, a substance that has the tendency to bring a subject into a hypnotic or drugged state, neutralizes the subject's imagination, and expect them to reveal the truth. This test is used mainly by investigating agencies as a softer alternative to torture in order to get the truth from the suspects of any crime.

KEYWORDS: Brain mapping, Psychotherapy, Narcotics, Semiconscious, Brain waves.**INTRODUCTION**

The Narco analysis test is also known as Truth Serum Test. Narco-analysis is a form of psychotherapy and effective aid to scientific interrogation. In a narco analysis test, a drug like sodium amytal is used as a truth drug on the suspect for the determination of facts about the crime. In a Supreme Court decision of 2010, it declared that narco-analysis, polygraph, and brain mapping tests on an accused are illegal. However, the court allowed the use of similar techniques in criminal

cases with the consent of the subject and under certain restrictions. During test examiner pinch a needle and ask you to contract your muscles. So it can be painful. In Narco (Narcoanalysis) test, the person is injected with 'truth serums' that cause the person to become uninhibited and talkative. In a narco analysis test, a drug called sodium pentothal is injected into the body of the accused, which transports them to a hypnotic or sedated state in which their imagination is neutralised.

**Figure 1: Psychoactive Drugs.**

Once the drug is injected, the individual is put in a state where he/she can answer only specific questions. Such tests are not always permissible in the law courts because when the person is in a semi-conscious state, they are not prepared to answer most of the questions. Note that narco and narc are slang for a government agent or detective charged with the enforcement of laws restricting the use of narcotics. Both narco and narc are shortened from narcotic, which as you may have guessed, also comes from the Greek *nárkē*. The drug

used in narco-analysis is known as sodium pentothal, which may have harmful effects on the person on whom it is administered. It can affect the respiratory or the circulatory system of the person. Sometimes, it may even affect the nervous system of the person and cause laryngeal spasm, nausea, and headache. Under the Constitution nobody can be forced give evidence against himself. That is what polygraph test does. Police cannot even administer a polygraph test unless the accused specifically gives his/her consent! Polygraphs are the

most popular lie detector tests used in the United States. Polygraphs measure physiological arousal factors, including heart rate, blood pressure, respiration, perspiration, and skin conductivity. This combination medication is used to relieve moderate to severe pain. It

contains an opioid pain reliever (hydrocodone) and a non-opioid pain reliever (acetaminophen). Hydrocodone works in the brain to change how your body feels and responds to pain.



Figure 2: Semi Consciousness Condition by Psychoactive Drugs.

The 4 Panel Drug test cost varies INR 3500 to INR 9000 by region and facility. So constantly get tested at trustworthy diagnostic centres like Ganesh Diagnostic. The term narco-analysis was coined by **Horseley**. Narco analysis poses several questions at the intersection of law, medicine and ethics. Narco-analysis is a term invented by Horsley to describe a psychotherapeutic technique, in which, by the administration (usually by intravenous injection) of a narcotic drug, the patient is put into a soporose state before being brought to discuss matters. The first step is the screening test, which is an immunoassay based test applied to all samples. The second step, known as the confirmation test, is usually undertaken by a laboratory using highly specific

chromatographic techniques and only applied to samples that test positive during the screening test.^[1]

Narco analysis tests involve the injection of sodium pentothal, which is also called Truth Serum. The administration of the drug (sodium pentothal) lowers an individual's self-consciousness, thereby allowing him/her to speak freely. This happens when the person becomes less inhibited and enters a hypnotic state. This stage allows examiners to question the subject and get real answers. Narco test is done under the observation of a psychologist, investigating officer, or a forensic expert. It is a lighter alternative to other commonly known third-degree treatments used by investigating departments.”



Figure 3: Narco Test by Psychotherapy.

Before the actual procedure, the subject is physically diagnosed to check whether his/her medical condition is worth the test. The individual is injected with hypnotics Sodium Pentothal, also known as Thiopentone. However, the dosage is dependent on the individual's age, sex, and other medical conditions. The wrong dosage can result in an individual's death or maybe coma. In addition to this, other precautions need to be taken while conducting the test. The application of the drug sedates the patient and puts them to sleep. Once the drug is injected, the individual is put in a state where he/she can answer only

specific questions. Such tests are not always permissible in the law courts because when the person is in a semi-conscious state, they are not prepared to answer most of the questions. On the other hand, other courts accept it fully.

P300 Tests: When the brain identifies the person's sound, it produces a particular type of electric wave, which is called P300. During the test, the person is seated in front of the monitor. He further showed some images or made to hear different sound types. Post which

the sensors attached to the patient's brain start monitoring electrical activity in the brain and record as P300 waves. The P300 electric wave is generated only if the person carries any link with the stimulus- which is

pictures or sounds (in this test). Investigators conduct P300 tests to evaluate their findings and conclude whether a suspect is speaking the truth. This test is also known as the Brain Mapping Test.

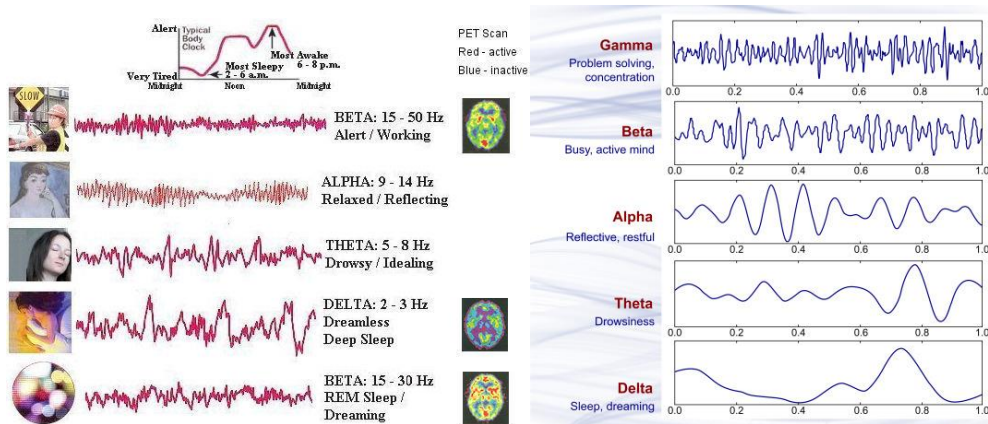


Figure 4: Brain Waves at Narco Test.

Narcoanalysis Test. This test is done to have verbal elicitation from a suspect when brain mapping indicates that the subject has definite information about commission of crime. It is also known as truth serum test based on the concept that if a person is administered a drug which suppresses his reasoning power without affecting his memory & speech. He will speak the truth. In this test person's imagination is suppressed/neutralized & reasoning faculty affected making him semiconscious. He is not in position to speak up on his own but can answer specific & simple questions. It becomes difficult for him to lie & his answers would be restricted to facts he is already aware of as he is unable to manipulate his answers being semiconscious. It is conducted by mixing 3gms of sodium pentothal or Sodium Amytal dissolved in 3000ml of distilled water depending on the person's age, health, & physical condition. This mixture is intravenously along with 10% of dextrose over a period of three hours. The rate is controlled to take accused to hypnotic trance & then interrogated by the investigating officer in the presence of team consisting of doctors including Physician, anaesthetist, & psychologist. The revelations

made during this stage are recorded both in video & audio cassettes. The report is prepared by the experts is used in the collection of evidence. This is conducted in Government hospital after a court order is passed order to the doctor or hospital authorities. Permission from the jurisdictional court is essential. Consent from the individual is mandatory. Medical fitness certificate by a physician is obtained prior to the test.^[2]

Difference from Polygraph and Narco test: A polygraph test, which is popular as a lie detector test, uses an instrument that evaluates and records several physiological indicators, like breathing rhythms, blood pressure, skin problems, respiration, pulse, etc. This happens when the suspect goes through a series of interrogations. A polygraph test is based on the assumption that there is a link between the mind and body. Various components of a polygraph machine conduct it. Devices like sensitive electrodes or cardio cuffs are attached to the person, and variables like blood pressure, respiration, change in sweat gland, blood flow, etc., is measured.



Figure 5: Brain Mapping Test.

A number is assigned to each recorded answer to understand whether the person is lying, telling the truth, or is uncertain. They rely on physiological responses that supposedly differ when someone lies, measuring variables like blood pressure, pulse rate, and respiration through instruments attached to the suspect. Unlike narco analysis, polygraph tests do not involve injecting drugs into the body. Narco Analysis or Narco Test is an investigative type of tool which requires the injection of sodium pentothal, a substance that has the tendency to bring a subject into a hypnotic or drugged state, neutralizes the subject's imagination, and expect them to reveal the truth. Rather than injecting drugs into the body, polygraph tests attach instruments like cardio-cuffs or sensitive electrodes to the suspect (while being questioned) and measure variables such as blood pressure, pulse rate, respiration, etc. The P300 wave

obtained by visual stimulation is used to assess cognitive processes in humans, and the value of the latency and amplitude of the P300 wave can be a measure of the severity of dementia processes. Brain-mapping is a comprehensive analysis of brainwave frequency bandwidths. In this test, forensic experts apply unique neuroscience techniques to find out if a suspect's brain recognises things from a crime scene which an innocent person's brain will have no knowledge of. Brain mapping is an important clinical procedure that can be used in the evaluation of patients suffering from a variety of disorders, including: ADHD [attention deficit hyperactivity disorder] / ADD [ADD (attention-deficit disorder) is an outdated term for what is now called ADHD (attention-deficit hyperactivity disorder).], Autism Spectrum Disorder [ASD].^[3]



Figure 6: Psycho Treatment.

CONCLUSION

This refers to the practice of administering barbiturates or certain other chemical substances, most often Pentothal Sodium, to lower a subject's inhibitions, in the hope that the subject will more freely share information and feelings. The term Narco Analysis was coined by Horseley. Narco analysis first reached the mainstream in 1922, when Robert House, a Texas obstetrician used the drug scopolamine on two prisoners. Since then narco testing has become largely discredited in most democratic states, including the United States and Britain. There is a vast body of literature calling into question its ability to yield legal truth. Additionally, narcoanalysis has serious legal and ethical implications. A person is able to lie by using his imagination. In the Narco Analysis Test, the subject's inhibitions are lowered by interfering with his nervous system at the molecular level. In this state, it becomes difficult though not impossible for him to lie. In such sleep-like state efforts are made to obtain "probative truth" about the crime. Experts inject a subject with hypnotics like Sodium Pentothal or Sodium Amytal under the controlled circumstances of the laboratory. The dose is dependent on the person's sex, age, health and physical condition.

The subject which is put in a state of Hypnotism is not in a position to speak up on his own but can answer specific but simple questions after giving some suggestions. This type of test is not always admissible in the law courts. It states that subjects under a semi-conscious state do not have the mind set to properly answer any questions, while some other courts openly accept them as evidence. Studies have shown that it is possible to lie under narcoanalysis and its reliability as an investigative tool is questioned in most countries. A few democratic countries, India most notably, still continue to use narcoanalysis. This has come under increasing criticism from the public and the media in that country. Narcoanalysis is not openly permitted for investigative purposes in most developed and/or democratic countries. In India, the Narco Analysis test is done by a team comprising of an anaesthesiologist, a psychiatrist, a clinical/ forensic psychologist, an audio-videographer, and supporting nursing staff. The forensic psychologist will prepare the report about the revelations, which will be accompanied by a compact disc of audio-video recordings. The strength of the revelations, if necessary, is further verified by subjecting the person to polygraph and brain mapping tests.

ACKNOWLEDGEMENT



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Jaydeep Roy



Falguni Dutta



Rahul Kumar Singh



Prof. Dr. Dhrubo Jyoti Sen

The article on narco test is framed by the joint venture of BPharm final year student [Rishav Banerjee] third year students [Dibyendu Dutta, Jaydeep Roy, Falguni Dutta and Rahul Kumar Singh] supervised by Prof. Dr. Dhrubo Jyoti Sen; School of Pharmacy, Techno India University, Kolkata, West Bengal. This *Narco test is the brain mapping by psychotherapy to get information of truth* is the reflection of polygraph which is the full biochemistry and pharmacology of cognitive behaviour through ultra-short acting barbiturates and benzodiazepines recently published by the research team: Dhrubo Jyoti Sen, Dibyendu Dutta, Jaydeep Roy, Falguni Dutta, Rahul Kumar Singh and Rakesh Mondal; Polygraph is the lie detection of truth from uncovering armour of the crime by chemicals from physiological response: World Journal of Advance Healthcare Research: 8(8), 287-293, 2024. (ISSN: 2457-0400, Impact Factor: 6.711, Index Copernicus Value: 77.3) [BEST PAPER AWARD] https://www.wjahr.com/home/article_abstract/1935

REFERENCE

1. Tollefson GD: The amobarbital interview in the differential diagnosis of catatonia. *Psychosomatics*, 1982; 23: 437-438.
2. Bleckwenn WJ: Production of sleep and rest in psychotic cases. *Arch Neurol Psychiatry* 1930; 24: 365-375.
3. Dhrubo Jyoti Sen, Dibyendu Dutta, Jaydeep Roy, Falguni Dutta, Rahul Kumar Singh and Rakesh Mondal; Polygraph is the lie detection of truth from uncovering armour of the crime by chemicals from physiological response: *World Journal of Advance Healthcare Research*, 2024; 8(8): 287-293.