A Research Paper on

POLYGRAPH AND NARCO TEST IN INDIAN EVIDENCE LAW-
THROUGH CASE LAWS

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ABSTRACT

This article deals about the how polygraph and narco analysis plays a major role in evidence and its constitutional validity. With the advancement of science and technology, sophisticated methods of lie detection have been developed which do away with the use of “third degree torture” by the police. The scientific tools of interrogation namely- the Lie detector or the Polygraph test, or the Brain Mapping test and the Narcoanalysis or the Truth Serum test are the main three tests that have recently been developed for extracting confessions. These psychoanalytical tests are also used to interpret the behaviour of the criminal (or the suspect) and corroborate the investigating officers’ observations. The deception detection tests (DDT) such as polygraph, narco-analysis and brain-mapping have important clinical, scientific, ethical and legal implications. The DDTs are useful to know the concealed information related to crime. This information, which is known only to self, is sometimes crucial for criminal investigation. Scientific evidences are crucial to the fact finder in order to arrive at the logical consequence in deciding large number of issues brought before him/her. In the present era, they have almost become indispensable to them. However, a key issue which can be encountered by a judge/jury whenever scientific evidence is put before him/them is whether scientific evidence is worth believing or not. This is because due to the subjective nature of tests like narcoanalysis, the foremost criticism levelled against conducting the test is its conclusiveness. So it plays a major role in evidence at the time of investigation.

KEYWORDS: Polygraph, narco analysis, evidence, investigation, constitutional validity.
INTRODUCTION

The use of scientific evidence in criminal trials and the admissibility of this evidence in court.. The police handle these cases in their own way and by their own methods. That is to say by resorting to third degree methods, which a civil society governed by rule of law cannot at we can seek the help of scientific evidence for effective delivery of justice as it combines both science and the law. We use a number of scientific techniques like DNA, asphyxia, epiphysis, etc which have been discussed in the previous chapter. Here, in this chapter, the researcher has narrowed down the permit. India has always postulated that evil could not be eradicated by evil in any respect. Therefore, all this must be within the legal framework. It is here to study the use and admissibility of three specific techniques namely Narco-Analysis, Polygraph And Brain-Mapping. The cardinal principle in applying scientific aids to investigation is the rule of fair play, unbiased approach and openness of mind from collection, evaluation analysis and use of these scientific evidences both by investigators and forensic experts. Forensic science plays a vital role in crime detection. According to Encarta World Dictionary, meaning of the word forensic, is “crime-solving relating to the application of science to decide questions arising from crime or litigation”. In present scenario, forensic science can be said to be an important branch of jurisprudence. It is potent and powerful weapon in the armory of administration of justice. The operation of forensic is nothing but application of techniques and tools of basic science for various analysis of evidence associated with crimes. 1

The scientific examination by forensic scientists adjoins a missing link and strengthens the weak chain of investigation. Now, when criminals are shrewd enough that they hardly leave any evidence, we need to bring into picture forensic science. In Som Prakash v. State of Delhi2, Supreme Court recognized the requirement, the necessity of scientific investigation. Law Commission also emphasized on the need of training of Police officers in using scientific methods of investigation. Narco-Analysis, Polygraph and Brain-Mapping are revolutionary tools of forensic science that can prove to be very fruitful in crime investigation.

AIM OF THE STUDY

❏ To study about polygraph analysis under Indian Evidence Act
❏ To study about the narcoanalysis under Indian Evidence Act
❏ To study about the sc judgments on polygraph and narco analysis
❏ To know about the procedures for conducting these tests
❏ To study about the constitutional validity of these tests

HYPOTHESIS

This Polygraph and Narco analysis plays a major role in Indian Evidence Act.

RESEARCH METHODOLOGY

The research is primarily doctrinal research and secondary data which is collected from the websites and library and international journals and articles. The books collected and literature reviewed gives a better idea of the topic and scope of research. The secondary sources details are mentioned in reference section.

CHAPTERISATION

CHAPTER-I Narco analysis test under Indian Evidence Act and its constitutional validity
CHAPTER-II Polygraph test under Indian Evidence Act and its constitutional validity

NARCO ANALYSIS DEFINITION

The term Narco analysis is derived from the Greek word ‘NARKE’ which means Anesthesia or Torpor and was used to describe a diagnostic psychotherapeutic technique that uses psychotropic drugs to introduce a stupor suspension or great diminution of sensibility, a state in which mental element with a strong associated affects come to the surface where they can be exploited by the therapist (or investigating agency. The Narco analysis test is also known as Lie Detector Testing or Truth System Testing. Under this test the person goes into the unconscious state by passing the serum and speaks whatever is present in their mind. This high technology forces two professions, which are law and science, to work together in the array of cases.  

OBJECT OF THE TEST

Object behind the Narco analysis test is that to resort the lying uses by a person through his imagination but in the Narco analysis test this imagination is neutralized as the person goes into the subconscious stage. Hence it is believed that the person cannot tell lie and whatever he answers is spontaneous and true.

NEED FOR THE NARCOANALYSIS

In the Nutshell, during the last few years, the field of criminology has expanded rapidly. Thus there is a need for the detecting deception test and to improve the efficacy of the investigation. When the accused are not coming forward with the truth and to have a further clue in the matter further investigate the crime truth and to apprehend the real culprit by getting some clue after the test. The conducting of Narco analysis is in the process of collection of evidence by the investigating agency. The scientific test helps the investigating agency in the collection of the hidden evidences and to prove the guilt or innocence of the accused, as the modern scientific test helps to protect the society also from the third degree methods of the Police officers.

- History of Novel Scientific and Technical Tools of Instigation with Reference of the Frye Case and Dubert Case

The history of the admissibility of scientific testimony involves two very instructive and interesting cases that illustrate the difficulties that courts have had in determining the standard for admissibility of novel scientific evidence. The Frye case

Prior to 1923 in the United States, most courts treated scientific evidence the same as any other type. The rule governing the admissibility of evidence were derived from the Common Law. There was no codification of specific rules. In 1923, the landscape changed for novel scientific evidence, owing to a murder case in Washington, D.C. James Frye was on trial for murder. As part of his case, he sought to have introduced the result of a test that utilized a machine that could be considered the forerunner of today’s polygraph. He claimed that the result of the test helped to prove that he was innocent. The prosecution objected to the admission of his novel evidence, and the judge agreed. On appeal, the court upheld the trial judge’s decision. In effect the appeal court stated that, with respect to novel scientific evidence, Just when a scientific principle or discovery cross the line between the experimental and demonstrable stages is difficult to define.

- Somewhere in this twilight zone the evidence force of the principle must be recognize, and while court will go a long way in admitting expert testimony deduced
from a well recognised scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field to which it belongs. Thus, the slandered for novel scientific or technical evidence that came out of this decision was that before new scientific technique could be introduced in court, the underlying principle that governed it, must have achieved general acceptance within the particular field to which it belongs.

- One important issue was not decided by the court, i.e. what constitutes general acceptance. In fact, this issue has never been clearly decided. It has come to mean, more or less by default, that the technique and principles should have been published in a peer reviewed journal or other equivalent exposure to the field the federal courts and about half of the States used the Frye case as the yardstick to evaluate the admissibility of new scientific techniques.

- During that time a number of novel scientific techniques were subject to “Frye challenges” in various courts. They included Voiceprint Spectrography’ Blood Spatter Pattern Analysis, Polygraph analysis, and even DNA Typing techniques. On, January 2, 1975, the Congress, the first time, approved an evidence code.

- This had been proposed by the U.S. Supreme Court in a preliminary draft from in 1969. Its effective date was July 1, 1975 the proponent of expert testimony had the burden of demonstrating that the expert was qualified and that the opinion evidence would have been helpful to the fact finder (the judge). After the new evidence would code was adopted by Congress, federal and many state courts became divided as to whether Frye or the new Federal Rules should be used to determine the admissibility of the scientific evidence.

- The question was addressed and settled by the U.S. Supreme Court in Dubert v. Merrill-Dow37, which is discussed as below: Dubert v. Merrill-Dow The plaintiff in Dubert v. Merrill-Dow, heard in federal District court, was a pregnant woman, who took Bendectin, a Merrill-Dow product that had been prescribed for many years to relieve Nausea that occurred during pregnancy. After her baby was born with birth defects, she sued Merrill-Dow, claiming that Bendectin caused the birth defect. Since biochemical causes of birth defects are not fully understood, there was no direct way for Deubert to establish directly that Bendectin was the cause of the defects. Instead, the plaintiff had to resort to epidemiology, the study of the cause and effects of disease on large populations.
The plaintiff and defendant both retained statisticians to determine whether the instance of birth defects among women who took Bendectin during pregnancy were statistically greater than birth defects in the general population. The plaintiff’s expert conclude that there was a significant increase in birth defects among Bendectin user’s babies, whereas the defendant’s expert conclude that the plaintiff’s expert did not use methods that were generally accepted by the scientific community in reaching their conclusions; that is, they argued and, upon a motion for summary judgment, found for the plaintiff, Merrell-Dow. Dubert appealed and eventually the case reached the U.S. Supreme court. The court ruled that the trial judge had used the wrong standard of admissibility in reaching his ruling.

The Supreme Court concluded that the federal courts could not use the Frye rule any more in deciding question about the admissibility of scientific or technical evidence, and that the doctrine general acceptance was not the proper yardstick. Instead, the courts must use the admissibility of novel scientific or technical evidence. The Court drew particular attention to, If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise. In interpreting the federal Rules including the court indicated that the judge must be the gatekeeper who decides when novel scientific evidence is admissible. In doing so, the court went as far as to suggest several criteria that a judge could use in the gatekeeper role.  

These criteria were not meant to be exhaustive, but not only suggestive:

(a) **Falsifiability**: If, the underlying theory or principle behind a novel technique has been repeatedly tested to see, if, it is false and in all cases the theory is verified, this can be a good measure of validity. This is not amenable to all principles, and proper research design must be implemented for this to be a valid criterion.

(b) **Knowledge of error rates**: If, the error rates of the result of a technique are known or can be estimated, then a judge could presumably make some determination as to the

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reliability and validity of a technique. For some techniques however, there is little or no qualifiable data available to determine an error rate.

(c) Peer review: Certainly, a technique or method or principle that has survived the peer review process and has been found worthy of publication has demonstrated some level of scientific validity. This is tempered, however, by the issue of the quality and scholarliness of the journal in the applicable field.

(d) General acceptance: the Supreme Court of U.S. never meant discard general acceptance as an acceptable criterion for determining scientific validity. the court conclude that this should not be the only criterion and that there exist In addition, the court’s decision mandate that novel scientific techniques must be based on scientific principle, not speculation, and that the scientific basis for the principles had to be a demonstrated.

ADVANTAGES AND DISADVANTAGES OF NARCO ANALYSIS IN INDIAN CRIMINAL JUSTICE SYSTEM

Advantages:

● By looking the present pathetic condition of society regarding criminals, crime rate and affected innocent people, it seems to be right time to check the ways by which this can be reduced.
● It can be possible by giving rich technology to the investigation agencies and Narco analysis is one of them.
● To facilitate the investigating agencies there is need to provide an option of scientific tools which can be applied when there is absolute darkness to discover evidence. The traditional method of extracting truth by torture is very heinous which violates the rights of individuals and it is also blot in the society.
● The process is only harmful to the body when the doses are very high which only injected in the presence of experts. The questions framed by the specialized person and expertise of the process so there is very less possibility to tell a lie, as indicated by many foreign and Indian writers.
● The evidence extracted through this process may be denied as reliable but it can be used to get an admissible evidence, to corroborate with other evidence or in support of other evidence.
A Mere questioning of a person by a police officer while the person is suspected in a crime and the same is voluntary statement cannot reveal as incriminatory. As in Abu Salem Case, he disclosed many important information and his involvement of crime.

Disadvantages:

- In the process the chemical is administered in the body of a person so the dose of the chemical decides according to physique, mental attitude and will power of the person. A wrong dose of chemical may lead to a state of coma or even death of the person. If the person is drug addicted one then again the process is not as much successful as needed for collecting evidence.

- Reliability of information given by the subject is also under some shadow because the subject from whom the information is collected is in semiconscious stage and hence the question of reliability of such information is being raised.

- The well known principle of criminal justice system is that the person giving information should be „well and fit” but in the narco analysis test the person is in semiconscious stage. Legally speaking, the constitution of India part III Article 20(3) clearly says no person shall be a witness against himself. The process may declare as a violation of fundamental rights of Constitution.

- Section 25 of Indian Evidence Act, 1872 says that the confession made by a person under police custody could not be admitted as evidence. It means there would be possibility of non-admissibility of evidence after performing the whole process. Under section 161 of the criminal procedure code „the police officer authorised for investigation may ask orally any question to the person aware of facts and circumstances of the case and person shall bound to answer all the question except the questions, answer of which would have a tendency to expose him a criminal charge or to a penalty or forfeiture.

- Thus the Narco-analysis Test contains both advantages as well as disadvantage features. Law as a guardian of the society needs to be changed in science and technology, according to the social paradigm, ethics

- The developments and scientific use of such developments should be welcome step in the criminal justice system. There are other reasons which can be enumerated here: Our criminal justice system needs to raise capability and sophistication and for this object, there is need to include new scientific methods of investigation process.
Society is dynamic and the crime pattern has also changed over a period of time and technological advancement made the system much more complex and requires this methods. In India the conviction rate is very less and crime rate is very high. The main factor responsible for this gap is poor investigation, which can only be solved through improvement in the investigation and for this reason scientific method like narco test is a must.

Various cases like Abu Salem, Nithari case, Arun Bhatt Kidnapping case etc. the Narco Analysis was very much useful in solving the cases. Thus using this method the complex offences can be resolved. Now a day’s criminals are going on high-tech and indulging in cyber and internet crimes.

To extract truth from them with traditional method of investigation is not much effective in the criminal justice system. World’s best investigation Agency like US had used the Narco Analysis test for extracting truth after September 11 incident and it was written by Gerald Posner that US agency also privately believes that the Supreme Court of US also implicitly approved using such test where the public safety is at risk.

The head of Drafting Committee of the National Criminal Justice System Policy Prof. N.R. Madhavan also recommended for the utilization of scientific method in investigation process in India.  

Narco analysis from evidence perspective

It is an important tool of the investigation especially the cases when lack of there is a evidence. Section 25 lays down that a confession made by a person to the police officer is inadmissible and cannot be proved. The basic object of this section and Section 26 is to prevent practices of torture by the police officers for the purpose of extracting confessions from the accused persons. Although both sections seek to achieve same purpose they operate in different fields. It is well known that the police officer to secure confession uses short cut methods even by putting the arrested person into third degree so that the arrested person confesses. “The principle upon which the rejection of confession made by an accused to a police-officer or while in the custody of such officer (Section 26) is founded that a confession thus made or obtained is untrustworthy.” This is the reasons for which no confession made to

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a police officer shall be proved under section 25 as against person accused of an offence. To avoid these custodial tortures there is an need of narco analysis test is very much essential.

Opinions of experts:

Section 45 of Indian Evidence Act

When the Court has to form an opinion upon a point of foreign law or of science or art, or as to identity of handwriting or finger impressions, the opinions upon that point of persons specially skilled in such foreign law, science or art, or in questions as to identity of handwriting or finger impressions are relevant facts. Such persons are called experts.

Illustrations:

(a) The question is, whether the death of A was caused by poison. The opinions of experts as to the symptoms produced by the poison by which A is supposed to have died are relevant.

Drugs and Narcotics:

Contraband was seized under the Narcotic Drugs and Psychotropic Substances Act, 1985. The analyst in his chief examination stated that the contraband was “charas.” It was held that the probative value of his evidence could not be destroyed merely because in cross-examination he could not answer whether the contraband contained cow dung also.

Constitutional Perspective:

Such tests generally don’t have legal validity as confessions made by a semi-conscious person are not admissible in court. The court may, however, grant limited admissibility after considering the circumstances under which the test was obtained. The petitioners in one of the case said courts could not direct the prosecution to hold Narco analysis, brain mapping and lie detector tests against the will of the accused as it would be violative of Article 20 (3) of the Constitution. The main provision regarding crime investigation and trial in the Indian Constitution is Art. 20(3). It deals with the privilege against self incrimination. The privilege against `self incrimination is a fundamental canon of Common law criminal jurisprudence. Art. 20(3) which embody this privilege read, “No person accused of any offence shall be compelled to be a witness against himself”. Subjecting

the accused to undergo the test, as has been done by the investigative agencies in India, is considered by many as a blatant violation of Art. 20(3) it was held that to attract of Constitution. The application of Narco analysis test involves the fundamental question pertaining to judicial matters and also to Human Rights. The legal position of applying this technique as an investigative aid raises genuine issues like encroachment of an individual’s rights, liberties and freedom.

In the case of Santokben Sharma Bhai Ladeja v. State of Gujarat\(^7\), the Gujarat High Court held that “the Narco-Analysis test is conducted under the supervision of doctors and proper care is taken and there is consent, observation of the State of the accused, and ,as such ,the element of risk is minimal .Risk is in fact part of life and pervades in most of human activities and on this ground, alone, therefore, the impugned test cannot be condemned .

In Dr. Rajesh Talwar and Another v. Central Bureau Investigation through its Director and Other,\(^8\) which commonly known as Arushi Murder case. In this case 97 2008 CriLJ. 3992 Arushi, a 14 year girl was found to be dead in the home on 16-05-2008. The report was made by the parents of Arushi in the police station .In this case Hemraj, who was a domestic servant in the house of Arushi, was suspected of murder of Arushi .But after two days the dead body of Hemraj was also found on the terrace of the house of Arushi .The parents of Arushi were arrested by the police. In this case Narco-Analysis test, Polygraph test and Brain mapping test was conducted on the accused person. It was pleaded before the court that the report of these tests cannot be taken as an evidence in the court of law. The narco test cracked the case it plays a crucial role in the case to find out the accused.

In the case of Rojo George v. Deputy Superintendent of Police\(^9\), the Court while allowing a Narco Analysis test observed that in present days the techniques used by the criminals for commission of crime are very sophisticated and modern. The conventional method of questioning may not yield any result at all. That is why the scientific tests like polygraph, brain mapping, narco analysis, etc. are now used in the investigation of a case. When such tests are conducted under strict supervision of the expert, it cannot be said that there is any violation of the fundamental rights guaranteed to a citizen of India.


In Dinesh Dalmia v State\textsuperscript{10}, the Court observed that where the accused had not allegedly come forward with the truth, the scientific tests are resorted to by the investigation agency. Such a course does not amount to testimonial compulsion. From the above discussion, it is very evident that conducting a Narco Analysis test does not violate Article 20 (3) per se. Only after conducting the test, if the accused divulges information which is incriminatory, then it will be hit by Article 20(3). Other information divulged during the test can help the investigation. Thus, there is no reason why we should prohibit such a test on grounds of unconstitutionality.

In fact, the revelations made during the Narco analysis have been found to be of very useful in solving sensational cases of Mumbai serial train blasts, blasts at Delhi, Malegaon and more recently in Hyderabad and in various other sensational cases of National and International ramifications. In most of these cases, the revelations made have led to the discovery of incriminating information favouring probative truth and consequently recoveries have been made in large number of cases U/s 27 of IEA. Thus, Narco Analysis is proving to be a useful tool in the field of criminal investigation. However, the legal hurdles in use of this technique should be removed first before its application. It is high time that we blend this test with Article 20(3) in such a manner that no questions are raised as to its constitutional validity. For this purpose, it is essential that the Union Government should come out with certain guidelines which are to be strictly followed while conducting such a test.

1. The permission of the Court and the written consent of the person undergoing such a test should be made compulsorily.
2. The person who is supposed to undergo such a test must be given all the necessary details about the test before he is asked to sign the consent form.
3. Control and supervision of the forensic laboratories should be made under the autonomous bodies like NHRC and the States Human Rights Commissions.
4. NHRC has suggested that at the time of polygraph test a forensic psychologist, a psychiatrist and an anaesthetist should remain present. Similar team can be directed to remain present at the time of Narco Analysis with the additional safeguard of entire proceeding audio and videotaped\textsuperscript{11}.


MEANING AND DEFINITION

The Polygraph testing or instrumental measures several psychological method (ex. Heart rate) changes in these process. From the chart of those measures in the response to the question on a Polygraph test and sometimes aided by observations during the Polygraph test examiners infer a psychological state, namely, whether a person is telling the truth or is he lying. This psychological phenomenon results in the mental excitation. Psychologically, the attempt made by the individual to conceal the excitation, is known as the ‘defense mechanism’, which stimulates the adrenal glands, which in response secrete the adrenaline hormone.

The term Polygraph refers to a process in which selected physiological activities are recorded. According to the definition of Webster’s legal dictionary “a Polygraph is a device for measuring certain involuntary bodily responses, such as blood pressure and perspiration, from which an opinion is drawn as to whether or not the person being tested is telling the truth. 12

According to Wikipedia, the free encyclopedia available on the net, Polygraph is derived from Greek words ‘poly’/ ‘many’ and ‘refrain/ to write’ In the US Federal agencies, a Polygraph test is also referred to as a “Psychological Detection of Deception” or PDD examination. There is no Indian legislation which defines Polygraph, but United States Employees Protection Act of 1988 defines the term ‘Polygraph’ which means an instrument which: (a) Records continuously visually, permanently and simultaneously as minimum instrumentation tendered; (b) Is used, or the result of which are used, for the purposes of rendering a diagnostic opinion regarding the honesty or dishonesty of an individual. On the other hand, usually in India the suspects who are being taken by police or other security agencies to the forensic labs for detection of lies and deception, and where it is said that such person is being taken for Narco-Analysis test, generally also put to Polygraph test, but it is not the strict rule. The Polygraph test is so old that it had diminished the credibility in the minds of general public, therefore the police in the West seldom publicly say that the culprit is being taken for polygraph test (rather they say and mention Narco-Analysis test in India). 6

The most significant requirement of a yogin is Speaking truth. Truth is the emperor of

intrinsic worth. Truth is the ultimate asset. The essence of the Vedas is Truth. Have power over passions constitutes the real meaning of truth. Truth is virtue. Virtue is light, and light is pleasure. Ahimsa, brahmacharya, transparency, fairness, harmony, pardon, peace are forms of truth. Impartiality, self-discipline, humility, patience, decency, repudiation, deliberation, self-respect, strength, sympathy, and refraining from harm are the various forms of truth. All the above virtues, although apparently dissimilar, have but one and the same form, namely, truth. All these hold up truth and strengthen it. When the path of truth is crushed, the entire additionally also is done. When the root is watered, all the branches are automatically watered.

**Procedure for conducting Polygraph Test**

Originally, it is significant to note that there is no one polygraph technique. There are a great many polygraph techniques known by many names, even though they all have certain qualities in general. All polygraph tests involve the measurement of physiological responses (usually, respiration, palmar sweating, and cardiovascular activity) with an instrument while the subject is asked a series of questions. Polygraph tests begin with an interview during which the examiner psychologically prepares the subject for the test. Once collected, the physiological data are usually evaluated by the examiner. Failed law enforcement examinations are often followed by an intense interrogation designed to force the subject to confess to the crime in question. However, substantial differences exist between the various polygraph tests, Narco-Analysis, Brain Mapping, Hypnosis and Lie Detector Test, character of the pretest interview, in the structure of the question series, and in the assessment of the physiological data. Polygraph test is conducted is commonly known as ‘Lie Detector’ test. When a person is truthful, he has no tension in his mind. In this stage no psychological change arises, but when a person lies, psychological changes arise.

In this test examination conducted by the probe attached to the body of the person, who is interrogated by the expert. The variation in the pulse rate, the heart rate, the skin conductance, the blood pressure etc are measured.

Before conducting, the Polygraph test, there are some steps which are to be followed by the examiner –

- Go through the background of the case.
- Formatting questionnaire based on the background of the case.
- Apprise the subject on the objective of the test,
During the test the heart beat increases; blood pressure goes up, breathing and so on and so forth. In the very beginning a baseline for the psychological characteristic is established by asking whose answer the investigator known. Deviation from this predetermined baseline for truthfulness, measured by the Lie Detector, is taken as a sign of life. This test does not involve any direct invasion of the body. This basically produces a graph of multiple psychological parameters and hence the name Polygraph. In this test, the Polygraph taken gives a reading of the deviation of the psychological parameter from the baseline for truthfulness, which is determined by the natural question asked at the very beginning. The graph that it produced after the interrogation with target question, aimed to make a possible liar uneasy in his psychological reaction is examined by an expert who would then explain their reaction, in the court and also to the law enforcement officer to aid them in their investigation. His conclusion, which would flow from his reading of the Polygraph, may be admitted or rejected by a judge on appreciation of the statements and the objection raised thereto by the defense and other expert. In case of a Polygraph, the subject may or may not answer the question, his psychological reaction and the response of his answer to the analysis of that is to be tendered as evidence if and when the occasion arises.13

During the Polygraph test an expert and skilled examiner will make assessment of the following procedure—

a) An assessment of examiner’s emotional state;
b) Medical fitness of the examinee;
c) To identify overly responsive behaviour: specialised tests be conducted;
d) To assess overly responsive behaviour: specialised test be conducted;
e) To do factual analysis of case information and
f) To do pre-test interview and detail review of question.

In Polygraph process three aspects of human physiology are tested i.e.

a) Pneumograph tracing
b) Electrodermal activity tracing, and
c) Cardiovascular tracing. The first relate to respiration, the second to skin conductor or skin resistance and the third with blood volume and pulse rate.39 When an individual undertakes a Polygraphic lie detection test, the first phase of this usually involves an interview with the Polygrapher during which some biographical question will be asked or job application the

13 "Chapter VI Polygraph Test and its Legal Implication in the Indian ....”
actual nature of the question which will be asked during the lie detection test. It will be asked by the Polygrapher to the individual whether the individual understand every question. Many Polygraphers also use this first phase to obtain an initial impression of the testee and to judge whether the individual seems to be more of an honest, upright citizen than a deceiver. At this time, the Polygrapher will not have been switched on, but now the Polygrapher will explain its basic principle. He or she will connect the individual to the machine and show the testee how it work. The second phase begins when the suspect is asked a series of question to which the reply of either ‘no’ or ‘yes’ must be given. The Polygraph is switched on and now is out of sight of testee, usually behind him or her. During this phase, the various psychologically activity which may accompany the testee’s answer to the question is displayed and recorded on pen chart. The basic principle underlying modern Polygraph is that of making a comparison between how a person respond to non-incriminating question and how he or she respond to incriminating question.

This comparison does not look for any complex pattern of responding (for example, high heart rate and also low respiration rate when lying, and the reverse when telling the truth, but at magnitude and frequency of psychological activity to various sort of question. In relevant questioning techniques, several irrelevant questions are framed which have no basing on the case or involvement of the subject in a crime under investigation. The relevant question are interposed in-between irrelevant question, which have a direct bearing on the case, and are likely to draw stressed response from a quality subject. The typical relevant irrelevant test employ a series of 10-15 question comprised of crime relevant questions (e.g., “did you rob Mr. H.C. Gupta”) and irrelevant (neutral) question (e.g., “Are you sitting down”). The rational of the RT predicts that the since a guilty subject will answer the relevant question deceptively, it is expected that the guilty person will exhibit relatively strong physiological reaction to the relevant as compared to the truthfully answered irrelevant question. Conversely, the rational of the RTI predicts that since an innocent subject will answer all questions truthfully, it is expected that there will be little difference in the strength of reaction to the two types of questions.14

**Constitutional validity of polygraph test**

Judicial Response The lie Detection division renders valuable Polygraph aids in a number of important investigations conducted by CBI, Judiciary, Delhi Police and other law

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enforcement agencies. The Lie detection division maintain latest version of the computerized Polygraph equipment. The objectives of Lie detection are:

• To verify the statements of suspects, witnesses and the complaints.
• To economise and accelerate the process of investigation by screening innocent person where a large number of suspects are involved.
• Scientific interrogation of suspects in white collar crimes.
• To corroborate the findings of investigation by investigating officers.

The main legal provisions which governs the expert evidence (Lie Detector test), are in Indian Constitution, Code of Criminal Procedure, Indian Evidence Act. In Indian Constitution there are various provisions which are related with the protection of the accused person. In the Constitution of India, the provision of life, liberty and freedom has been given under Article 20 and 21. According to Article 20(3) “no person accused of any offence shall be compelled to be a witness against himself”. This article applies only to an accused and only speaks of self-incrimination evidence by way of compulsion. Under this Article only an accused person can avail the protection if he is compelled to be a witness against himself. Every civilized society guarantees the right against self-incrimination as a fundamental of fair trial in a criminal offence. According to this principle, a person accused of a criminal offence cannot be forced to incriminate himself or yield evidence against himself.15

In the case of State of Bombay v. Kathi kalu Oghad, 16 the Hon’ble Supreme Court observed that conducting the Polygraph by the police without the consent of accused person is clear violation of article 20(3) of the Indian Constitution. The right against forced self-incrimination is enshrined in Article 20(3) of the Indian Constitution as well as in the Criminal Procedure Code. In this case the Bombay High Court had to decide whether compelling the accused person to undergo this test would violate his right to silence and compel him to provide evidence against himself. In this case Palshikar j. held that the right against self-incrimination applies only to court proceeding and not to police interrogation.

In the famous case of Selvi v. State of Karnataka 17, there was a question before the court relating with the relevancy of Polygraph test. In this case the court has to decide that whether conducting the Polygraph test on the subject without his/her consent is

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constitutionally valid or not. The Hon’ble Court observed that Article 20(3) protects an individual’s choice between speaking and remaining silent, irrespective of whether the subsequent testimony proves to be inculpatory or exculpatory. The main object of Article 20(3) is to prevent the forcible ‘conveyance of personal knowledge that is relevant to the facts in issue’. The result obtained from each of the impugned test bear a ‘testimonial’ character and they cannot be categorized as material evidence. In this case, the Supreme Court has laid down some guidelines regarding Polygraph test also. The Court further held that Polygraph test should not be conducted on the accused person without taking his/her consent. If such test is conducted without taking the consent of the accused person, it would be a clear violation of Article 20(3) of Indian Constitution.

Admissibility of Polygraph Tests as Evidence: A Glimpse

The polygraph lie-detector technique for the detection of deception has been definitely established as a valuable investigative aid. It assists in the exoneration of the innocent as well as in the apprehension of the guilty. As with any diagnostic device or technique, however, the accuracy and validity of polygraph test results depend to a very great degree upon the competency and integrity of the examiner himself. 102 As the uses of Polygraph techniques have grown in recent criminal investigations and evidence, there is increasing concern about the factors that may adversely affect their accuracy and their uses in administrative and judicial proceeding. 103 Thus the High Court of Gujarat has held that “The legality, validity or evidentiary value of the Lie Detector test is again a question which has to be determined at the trial.”

Polygraph test conducted in a rape case.—In Bangalore, Karnataka, one Pratibha Srikanth, a woman employee of BPO was raped and murdered. The charge was framed on a driver hired by the company. The driver was subjected to polygraph test, brain mapping test, and narco analysis test.

Polygraph test conducted in Shivani Bhatnagar murder case.—The Indian Express Journalist Shivani Bhatnagar was murdered at her East Delhi apartment on 23rd January, 1999. In this case murder charge was framed on a Haryana Cadre I.G. Police Mr. R.K. Sharma and five other accused persons. The polygraph tests were conducted on Shivani’s husband, her sister, brothers and brother-in-law.

Polygraph test conducted on Nithari’s serial killing accused.—In Nithari, Noida (U.P.), a businessman Mohinder Singh Pandher and his domestic help Surinder Koli were accused of murdering 30 missing children. At the time of writing this book, the CB1 is investigating into
the case. In scientific tests suspected killer admitted serial killing of missing children. In this case the investigating agencies used polygraph, brain mapping and narcoanalysis tests on both of them and also on a female servant who allegedly lured children who were killed by both duo.

**Polygraph test conducted on Mumbai serial killer.**—One Ravindra Kantrole, a suspect of serial killing of seven people in South Mumbai in Marine Drive and Azad Maidan Police Station, was subjected to scientific tests like polygraph, narco analysis and higher version of brain mapping tests [i.e., Brain Electrical Oscillation Signature (BEOS)]. During these tests he confessed his involvement in the crimes. BEOS (brain mapping) and polygraph tests were conducted at Maharashtra Forensic Science Laboratory, and narco analysis tests were conducted at Bangalore Forensic Science Laboratory on 14th February, 2007.

Section 293 of CrPC any document purporting to be reported under the hand of government scientific expert, upon any matter, duly submitted to him for examination or analysis and report in the course of any proceedings under the code.

**Recent supreme court judgment on DDTs**

The Supreme Court judgment on May 5, 2010 related to the involuntary administration of DDT for the purpose of improving investigation efforts in criminal cases was questioned on the account of violation of fundamental rights such as: (i) ‘Right against self-incrimination’ enumerated in Article 20(3) of the Constitution, which states that no person accused of an offence shall be compelled to be a witness against himself/herself, and (ii) Article 21 (Right to life and personal liberty) has been judicially expanded to include a ‘right against cruel, inhuman or degrading treatment’. DDT also raises serious concerns related to the professional ethics of medical personnel involved in the administration of these techniques and violation of human rights of an individual. Concerns regarding human rights violations in conducting DDTs were raised long back and the National Human Rights Commission had published Guidelines in 2000 for the Administration of Polygraph tests. However, only few of the investigating agencies seen to follow these guidelines.18

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SUGGESTION

● The judiciary will order compulsorily to conduct these tests for rape accused.
● Judiciary will impose strict restrictions to conduct these tests in a proper manner.

CONCLUSION

DDT has faced a number of criticisms and it is still unclear to what degree lie. The manner in which modern-day criminals make use of science and technology in perpetrating their criminal activities with relative impunity has compelled rethinking on the part of the criminal justice establishment to seek the help of the scientific community to come to the help of the police, prosecutors and the courts. The criminal procedure, rules of evidence, and the institutional infrastructure designed more than a century ago, are now found inadequate to meet the demands of the scientific age.\(^9\) The absence of a national policy in criminal justice administration in this regard, is felt to be a serious drawback. If it is the duty of the judge to see no innocent is punished then he must also ensure that no guilty man escapes. Both are public duties, so there is a no violation of individuals rights. It helps many critical cases to find out the victims. This polygraph and narco analysis test plays a vital role in Indian Evidence Act.\(^9\)