

HAND BOOK OF FORENSIC MEDICINE & TOXICOLOGY

(Medical Jurisprudence)

5th
Edition

By
DR. P. V. CHADHA



JPB

DR. P. VIJAY CHADHA

**HAND BOOK OF
FORENSIC MEDICINE
AND
TOXICOLOGY**

(MEDICAL JURISPRUDENCE)

For

MEDICAL STUDENTS & PRACTITIONERS



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Preface to the Fifth Edition

The Hand Book of Forensic Medicine is again before me for the fifth time. It is a difficult decision to decide about deletions and additions. Most of the chapters have been revised and up dated. The obsolete matter has been deleted. However the brevity and concise manner has been retained from the examination point of view. This has been the hall mark of success of this book.

Forensic Medicine is a subject of great practical importance to medical students and practitioners. Many a time the doctor shall need the knowledge to deal medico-legal cases such as injuries, deaths and poisonings, rape (etc.). A medicolegal approach towards such cases prevents the doctor from cutting, poor show in the court of law. Hopefully this book shall meet all these demands.

My thanks are to my publishers for their endurance and patience to bring out this edition.

Sept., 1984

P.V. Chadha

My regards are to Dr. R.P. Bhargava, T.B. Chatterjee, Municipal Corporation, Delhi, for his constant encouragement during the course of preparation of the book.

I am thankful to Dr. Mrs. B. Chadha, my wife for helping in rewriting some chapters and in the preparation of Index.

Suggestions regarding the Subject matter and the pattern shall be welcomed. These may be sent to the author through the publisher.

P. V. CHADHA

Preface to the First Edition

This book is one of few attempts for students preparing for under graduate examination in Forensic Medicine and Toxicology. The whole book is in the Question and Answer form, which will be extremely useful for the students who do not know the art of answering questions in the examination and do not fare well despite their vast knowledge of the subject. In spite of this the continuity of the matter in each chapter is retained. Special Short Questions in each Chapter have been added so as to make a complete subject to the student, and he may not face any difficulty in oral examinations as well. The language of the book is simple, lucid and understandable to an average Indian Students.

The author however does not claim it as a substitute to text book, infact he advises the students to consult the text books whenever necessary.

My regards are to Dr. R.P. Bhagi, T.B. Control Officer, Municipal Corporation, Delhi, for his constant encouragement during the course of preparation of the book.

I am thankful to Dr. Mrs. B. Chadha, my wife for helping in rewriting some chapters and in the preparation of Index.

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Legal Procedures

MEDICAL JURISPRUDENCE—FORENSIC MEDICINE

The two terms are closely related but certainly not synonymous. Forensic Medicine is the application of medical and para-medical knowledge in the administration of law and Justice. Legal Medicine and state Medicine are other names for it.

Medical Jurisprudence is a subject dealing with a knowledge of law so far as medical men are concerned. It is concerned with the legal aspects of medicine. It deals with the legal rights, privileges, duties and obligations of medical practitioner.

Medical jurisprudence has two branches :

(a) Medical Jurisprudence proper : It deals with social and civil rights of individuals and injuries pertaining to the medico-legal aspects.

(b) Toxicology : It deals with the diagnosis, symptoms, methodology of detection and treatment of poisons.

CORONER

A coroner is an officer appointed by the government to hold an enquiry of deaths suspected as unnatural and suspicious in his jurisdiction. In India only city Bombay possess Coroners. In other towns District magistrates and other magistrates are ex-office coroners, although they seldom act as such. Coroner's court is a court of enquiry and not a court of trial. At the coroners court no accused is to be present but any suspected person should, if possible, be present. The accused has the right of producing witnesses, cross examining witnesses, either himself or through his counsel. The accused can make any statement which he may think fit. The coroner sends the alleged, if found guilty to the presidency magistrate for trial in a proper manner.

Duties of a Coroner

1. To hold an enquiry in the case of a dead body lying in his jurisdiction, the mode of death being sudden and unnatural.

2. To hold an enquiry if a death occurs where some suicide or homicide is suspected.

3. To hold an enquiry if a death is caused by an accident or poisoning.

4. To hold an enquiry if a death occurs because of a road-side accident.

5. To hold an enquiry if a death occurs in jail or in the court of law, police custody, asylum or in the certified school.

6. He can order any medical man to hold a post-mortem examination.

7. To summon the medical personnel who attended the case or who held the post-mortem examination to give evidence in his court.

8. He can order for identification of a dead body.

9. He can appoint a deputy coroner to act for him when sick or absent from any lawful or reasonable cause.

Police Inquest

The police officer incharge of a police station (usually a sub-inspector of Police) is supposed to inquire immediately into the unnatural and deaths suspected of foul play. He conducts the enquiry at the site of death with two witnesses of the area. He sends the information of the death to the concerned Magistrate. He can request the medical officer to conduct the post mortem in doubtful cases. The medical officer is obliged to report on the post mortem done and give a probable cause of death to the police official accompanying the dead body. A detailed report is later sent to the superintendent of the police who inturn forwards to the magistrate concerned.

In case of rape the victim is sent to the medical officer with a full report for a medical examination.

Table 1. Difference between Coroner's Court and Magistrate's Court

	<i>Coroner's Court</i>	<i>Magistrate's Courts</i>
(1) Type of court :	It is only a court of inquiry.	It is court of trial.
(2) Presence of Accused ;	The accused need not be present during the trial.	The accused should be present during the trial.
(3) Punishment	Coroner has no power to impose fine or punish the accused.	The magistrate can impose fine and punishment.
(4) Contempt of court ;	Coroner can punish those guilty of contempt of court, if the offence is committed within the precincts of his court.	Magistrate can punish those guilty of contempt of court, whether the offence is committed within or without the precincts of court.

Table 2. Difference between Police and Coroner's Inquest

	<i>Coroner's Inquest</i>	<i>Police Inquest</i>
(1) Investigating officer :	Inquest held by coroner who is qualified and experienced, and as such it is superior to police inquest.	Inquest held by police officer, sometimes by a Head Constable who is not qualified in law or medicine.
(2) Place ;	Held only in Bombay.	Held all over India except Bombay.
(3) Informing magistrate ;	He need not inform the magistrate about the crime.	He has to inform the magistrate of the area.
(4) Witnesses ;	Jury helps. He does not require the signature of the witnesses.	Panchayatdars help who are chosen at random. They sign the report.
(5) Warrant for arrest ;	He can issue warrant for the arrest of the accused.	He cannot issue warrant, but can arrest an accused in cognisable offence.

(6) Summoning of doctor ;	He can summon the doctor to his court to give evidence.	He cannot summon the doctor to give evidence.
(7) Exhumation ;	He can order a body to be exhumed.	He cannot order exhumation.
(8) Analysis of viscera ;	He can direct analysis of any of the organs or of their contents.	He cannot direct the analysis of viscera.

EXHUMATION

Def. It is the examination of a dead body taken out of the grave for the suspicion of a death because of poisoning or any other foul play.

Autopsies are performed on exhumed bodies in the following circumstances :

(1) In criminal cases *e.g.* homicides, suspected homicide masked as suicide, suspicious poisoning, death as a results of criminal abortion and malpractice.

(2) In civil cases such as accidental death claim, liability for malpractice, survivorship and inheritance claims or disputed identify.

This should be carried out by the order of :

1. District magistrate.
2. Coroner.
3. Sub-divisional magistrate.

A police officer cannot order exhumation. After exhumation Post-mortem examination is done by the medical officer and the parts are sent to the chemical laboratory for analysis.

The following parts are sent for chemical analysis :

1. Earth taken from above the coffin.
2. Earth taken from below the coffin.
3. Earth taken from within the coffin.
4. Hair from head.
5. Hair from pubes.
6. Nails, teeth.
7. Bones.

8. Heart.
9. Stomach.
10. Intestine.
11. Liver, spleen and kidney.

Time limit for examination :

In India and England : No time limit.

France : 10 yrs.

Scotland : 20 yrs.

Germany : 30 yrs.

Arsenic poisoning has a special significance because of its high content in various parts of the body on post-mortem analysis of exhumated bodies.

Practical Problems in Crime Detection in India

1. The investigating police officer may not find time to reach the scene of death due to his other engagements. Therefore time is lost in obtaining clues to the crime and decomposition of the body starts making more difficult for the medical officer to give a cause of death.

2. The police officer lacks training in the field of medical jurisprudence and therefore the reports lack completeness. By the time the body reaches the medical officer the body is under decomposition. Therefore the difficulty in detection of crime.

3. Many times the relatives and friends of the deceased conceal information in order to avoid their presence in the court of law.

4. The geographical and climatic condition of the country favour early decompositions of the body. The areas being large may make it difficult to take the body to the concerned medical officer

5. Familial enmity leads to conspiracy and false implication of charge of murder.

6. The forensic specialist usually does not visit the scene of the crime and thus misses considerable information.

COURTS

Courts are two types :

1. Civil courts
2. Criminal courts.

Criminal Courts

1. *Supreme courts* : It is the highest courts of the land. A supreme courts Judge can pass any sentence authorised by law.

2. *High Court Judge*. He can pass any sentence authorised by law.

3. *Session Judge or Addition Session Judge*. He can pass any sentence authorised by law. Death is the highest sentence which a session judge can pass but this has to be confirmed by the high court.

4. *Assistant Judge*. He is authorised to pass any punishment except death or life imprisonment or any imprisonment exceeding 10 years.

Chief Judicial Magistrate. He can pass :

(a) Imprisonment of upto seven years.

(b) Any fine.

First Class Magistrate/Chief Metropolitan Magistrate. He can pass.

(a) Fine upto Rs. 5000/-

(b) Imprisonment upto 2 years.

(c) Can also order a part of imprisonment as solitary confinement.

Second Class Magistrate :

(a) Fine upto Rs. 1000/-

(b) Imprisonment upto one year.

(c) Solitary confinement for a portion of imprisonment.

In case when the fine or punishment is much more than the powers of the first class magistrate he commits the case to the session court.

In presidency towns the Presidency Magistrate can commit his case directly to the High Courts.

SUBPOENA

It is a document compelling a witness to attend the said court on a given time and place and bring his reports along with the subpoena. Subpoena may be from :

(a) Civil court

(b) Criminal court.

Conduct Money. It is the fee offered by the court to the medical practitioner to cover the necessary travelling expenses. In case the subpoena does not accompany the conduct money the medical practitioner may ignore the subpoena. In case the medical practitioner feels that the conduct offered is not adequate, he may point this in the court before giving his evidence. In criminal cases the conduct money is sanctioned after the medical practitioner has given evidence. In no case the medical practitioner should insist on conduct money when he receives a subpoena from Criminal court because he is liable to be charged with contempt of court. In case of two summons from two courts, the criminal court should be attended and the other court informed lest one is charged of contempt of court. In case one receives two summons from the criminal court senior court should be attended and the other court informed. In case the court is not attended by the medical practitioner he is liable to an action for damages and in criminal cases, to a fine or imprisonment unless some reasonable excuse is forthcoming and is accepted by the court.

PUNISHMENTS

The common punishments allowed by law awarded are :

- (i) Death. (hanged by neck till death).
- (ii) Imprisonment for life. (max. upto 20 yrs).
- (iii) Imprisonment of some time but less severe than life imprisonment (part of it may be solitary confinement). This may be the form of simple or rigorous imprisonment.
- (iv) Monetary fine upto Rs. 10,000/.
- (v) Detentions in reformatories. DRC.

The death sentence can be commuted by the President of India (on mercy appeal), by Supreme Court of India (on appeal or by the High Court by merits).

PROCEDURES OF THE COURTS

I. Oath taking

Oath has to be taken by every witness in the court of law otherwise the evidence is not admissible to the court.

The witness has to keep his hand on the Gita, the Bible, the Kuran or any holy book prescribed for the said purpose.

The medical man has to take the Oath as "I solemnly affirm that whatever I speak will be truth, whole truth and nothing but truth".

II. Medical evidences

They are of two types :

- (a) Oral evidence
- (b) Documentary evidence.

Oral evidence. This may be direct which is an evidence of the eye witness or indirect which is related to subsidiary circumstances or associated events. It may be in the form of an opinion.

Oral evidence is more important than documentary evidence as it can be cross examined. However a person who gives documentary evidence may also be called to the court for oral evidence as well.

Documentary evidence. These constitute :

- (a) Medical certificates of ill health.
- (b) Medical certificate of insanity.
- (c) Medical certificates for death.
- (d) Medico legal reports of injury ; Post-mortem reports, abortion, poisoning, (etc.)
- (e) Dying declaration. Dying Deposition.

A medical certificate must be signed by a Registered Medical Practitioner. Usually the medical certificate is taken as a piece of evidence and the individual is not called to the court. If the genuineness of the certificate is doubted then the doctor can be called.

Medical certificate of ill health

A specimen is here by given :

I have examined Shri/Shrimati.....S/o/W/o/D/o whose signature/thumb impression is given below. He was found to be suffering from..... He is under my treatment from.....to..... He is advised rest for a period of.....day viz. from.....to.....

Signature of patient
Attested
Signature of Medical Officer.

Signature of the
Medical Officer.
Stamp.....
Date.....

Medical certificate for insanity

The certificate of unsoundness of mind should be issued only when the patient writes an application stating the reasons of his

want of the certificate. The certificate issued by the doctor should also have the additional notes of :

- (i) Nature of illness.
- (ii) Duration of illness.
- (iii) Time of treatment.
- (iv) Whether fit to write a will or not.

Medical certificate for death

While issuing a medical certificate for death the cause of death has to be obtained by the relative before the body is cremated. Whenever foul play is suspected the medical certificate should be held and a Post-mortem examination should be done. A senior medical officer has to counter sign the death certificate.

In order to avoid problems in cases of human organ transplant the following conditions be seen before removal of the organ from the donor :

- (i) The donor never expressed a wish against the removal of the organ.
- (ii) Valid consent of the near relatives is obtained.
- (iii) The fact of death is established and accepted.

Medicolegal Reports

All the medicolegal reports are sent to the court along with the file of the relevant case hence it is open to scrutiny by the opposing counsel. The medical officer is required to be present in the court and give evidence orally and be cross examined. Therefore greatest care should be taken while writing a report.

A report should give the date, time and place of examination. The names of individuals who identified the person or dead body. The technical details should be descriptive and complete. A copy of the report must be kept for further reference.

Dying declaration

It is a statement which is given by the patient who is likely to die of some unlawful act and states here the circumstances which have brought him for medical attention, *i.e.*, the manner in which he sustained injury and how he was brought to the hospital.

It is the duty of the medical officer incharge to get the dying declaration recorded. It is usually recorded by a magistrate. As soon as the patient comes to the hospital the medical officer sends a

call to the magistrate. If the patient's condition is critical the medical officer can start recording the dying declaration even before the magistrate arrives. The doctor has to certify that the patient is in a fit medical condition to give a dying declaration. Certain points should be noted while recording the dying declaration :

(a) The patient's relative should not be present.

(b) The police officer holding the enquiry should not be present.

(c) The patient should be explained that he is likely to die so that he speaks the truth.

(d) There is no need of administering an oath because it is considered that a dying man speaks truth.

(e) The dying declaration should be recorded in the patient's vernacular as far as possible. It is usually recorded in a question answer form.

(f) If the patient dies while the dying declaration is being recorded then it should be noted in the dying declaration that the patient had died and the time noted.

(g) The patient's signature and two identification marks should be recorded.

(h) The doctor should also sign and put his name in block letters, seal the document and send it immediately to the magistrate concerned.

(i) If the dying declaration is being given by a female a lady doctor or a nurse should always be present.

Importance of dying declaration.

1. It is a very important evidence in criminal and civil cases. The accused can be prosecuted on this evidence alone.

2. It acts as a corroborating evidence in favour or against whatever the patient says in court subsequently. It is valid even if the patient does not die.

3. It holds good even if the patient dies 10-12 days later than the day it was written.

4. Unless the fact is properly explained to the patient the statement is not valid.

Dying deposition

It is a statement made by a dying person on oath and recorded by the magistrate in the presence of the accused who is given full opportunity to cross examine the dying person either personally or