

THERAPEUTIC MISADVENTURE VS. NEOPLASIA INDUCED BY MEDICAL TREATMENT – ITS MEDICOLEGAL ASPECTS

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ABSTRACT

Therapeutic misadventure can be defined as an injury or an adverse event caused by medical management rather than by an underlying disease. Medication errors are a major part of this, being responsible for over 70% of cases that cause serious harm. However, many medication errors caused by slips, lapses, technical errors and mistakes are preventable; intentional violations of safe operating procedures are not.

KEYWORDS

Therapeutic Misadventure, Negligence, Neoplasia.

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Therapeutic misadventure is an unfortunate incidence that might result in death accidentally, while performing a medical procedure legally, without negligence or intent to harm. It is of three types.

- Therapeutic (when treatment is given).
- Diagnostic (where diagnosis only is the objective at that time).
- Experimental (where the patient has agreed to serve as a subject in an experimental study).

Therapeutic misadventure occurs not in all diseases or in all persons, one medicine may give the same or the expected result in all. Bio-physiological actions and reactions to different drugs are different and are extremely variable. Thus, individuals may react differently to the same drug, in the same dose and with same mode of application. Also, it is to our knowledge that some individuals may be quite tolerant to some drugs due to which the usual dose of the drug may not give the desired effect. On the other hand, some individuals may be idiosyncratic to some drugs while other is not. These are medical misadventures, which may cause extra suffering to the patient and the doctor is not actually responsible in these cases, as the doctor is not negligent in his act. However, the issue should not be considered so simple. An experienced medical practitioner having standard knowledge should be aware of the usual unexpected and unexplained reactions with different drugs in different individuals. He should be acquainted with the iatrogenic effects, side effects and contraindications of different drugs, at least of those used by him. It may be truly due to the therapeutic reasons when no action or an adverse reaction to a drug is there or when the doctor knows that the drug may cause some untoward reaction, or its prolonged use may cause some harm to the

patient, but finding no other way may he uses the drug. This condition, to a great extent is similar to medical misadventure.

Diagnostic misadventure, where some diagnostic procedure may bring hazard to the patient, as in case of injection of some radio-opaque dye in some special radiological investigation; laryngoscopy, bronchoscopy or explorative laparotomy.

Experimental misadventure, where a person might have been subjected to, use of some drug, or certain operative procedure on experimental basis.

- Almost every therapeutic drug and every therapeutic procedure can cause death.
- Injection of serum, antibiotics, etc. may cause anaphylaxis in sensitive persons.
- Negative history and negative test does not rule out rare possibility of anaphylactoid reaction and even death.
- A physician is not liable for injuries resulting from adverse reaction to drug unless some negligence on his part contributed to cause the injury.
- Ignorance of the possibility of a reaction, or continuation in the prescribing of a drug with adverse reaction amounts to negligence.
- While prescribing a drug that has adverse side effects, the doctor must be certain that the prescribed drug was the proper one for the disease.
- If there is any other drug which would be effective in treating the disease and is less likely to cause an allergic reaction, it should be prescribed.
- The doctor should particularly tell a patient of possible drowsiness or similar accident producing reaction caused by many drugs.^{1,2}

Some Examples of Therapeutic Misadventure are

1. Hypersensitivity reaction, sometimes serious or fatal, may be caused by penicillin, aspirin, tetracycline, etc.
2. Excessive administration of an antidote to a poisoned patient may cause death.
3. Prolonged use of stilbestrol may cause breast cancer.
4. Therapy may cause thyroid cancer.
5. Electric equipment, hot water pads, and heating pads may produce burns.
6. Blood transfusion may cause serious or fatal complications from bleeding resulting from haemolytic reaction due to hypofibrinogenaemia, hypofibrinogenaemia and thrombo-

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cytopenia. Other complications are haemosiderosis, viral hepatitis, hyperkalaemia and hypocalcaemia.

7. Radiological procedures used for diagnostic purposes may prove fatal and form a part of therapeutic misadventure, e.g., poisoning by barium enema, traumatic rupture of the rectum and chemical peritonitis during barium enema.
8. Foetal and neonatal deaths in utero may occur from drugs administered to the mother during pregnancy, e.g., Dicumarol, iodides, synthetic vitamin K, thiazide diuretics, etc.³

Neoplasia Induced by Medical Treatment

It is difficult to prove a cause and effect relationship between the therapy and trauma.

Examples

1. Haemangioendothelioma of liver induced by thorium dioxide is the classic example.
2. Radiation will cause leukaemia.
3. X-ray radiation or radium application to the head, neck or upper thorax for various nonmalignant conditions during childhood have an increased risk of developing thyroid gland cancer and also of the salivary glands and other head and neck structures.
4. Chlornaphazine and phenacetin may cause urinary tract carcinoma.
5. Contraceptive steroids can cause adenomas of the liver in females, and if continued unintentionally during pregnancy, the infant may develop a benign liver tumour.
6. Diethyl stilbestrol causes vaginal adenosis and clear cell carcinoma of the vagina.
7. Exposure to pesticides cause skin and vulvar carcinoma.^{3,4}

To avoid a Therapeutic Misadventure in Prescribing Drugs, the following Points should be Noted

1. Before prescribing any drug known to cause any adverse reaction, the doctor should make a reasonable effort to determine if any adverse reaction is likely to occur.

2. Sensitivity tests should be done before injecting preparations which are likely to produce anaphylactic shock.
3. The doctor should warn the patient of side effects which may occur while he is taking the drug.
4. The doctor should inform the patient about the possibilities of permanent side effects to avoid therapeutic misadventure.

In case of therapeutic and diagnostic misadventure, the defence of the doctor stands only if he can show that; the steps he took was quite justified, the hazards were quite unexpected and is not known to occur, he took reasonable precaution against the possible hazard as its possibility was known to him or, he had no other way but to take the risk of hazard, though he knew its possibility.

In case of experimental misadventure, if the doctor wants to use this point as a defence against a charge of negligence he must justify the reason for his experimentation and must show that he got valid consent from the patient or his guardian, after duly explaining him the merits and demerits of the experiment and the risk involved in the act.⁵

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