Editorial:

Death under anesthesia and surgical procedures.

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In most countries around the world, death occurring during or within a short time after surgical operation or invasive diagnostic procedures (e.g. angiography) or under anesthesia should be referred for medico legal investigation which must include an autopsy.

Alfred A.Angrist wrote in Bulletin of the New York during 1971 "the autopsy is the moment of truth for all medical care and the time of reckoning to improve the care of the patient.... It becomes a stimulus and incentive for better care and increases both empathy and science in medicine ...It crystallizes errors, exposes abuses and points out fads and fancies".

The forensic pathologist in charge of such a problem should be independent of the institution in which death occurred and autopsy should never be carried out by the clinical histopathologist of that hospital.

It is always important to have the expert opinion and advice of an independent clinical consultant who works in a separate institution or hospital and who has no connection with the team involved in that incident.

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For autopsy to be informative and the report to be precise and accurate a number of steps have to be taken in to consideration:

Any surgical or anesthetic device which have been introduced to the patient in the operation theater should never be removed but retained in the body for examination of its proper placement and its patency to be checked (e.g. airways, endotracheal tubes. indwelling needled, cannulae, catheters, wound drains, chest tubes, monitoring electrodes, and metal or plastic prostheses) .Special attention to endotracheal tube and its malposition oesophegeal intubation is fatal if not corrected rapidly.

The hospital lab, where death occurred should be ordered to retain any ante-mortem blood or body fluid samples which might be needed for analysis such as blood groups in transfusion mistakes or enzyme analysis.

Full information should be provided to the forensic pathologist before stating any autopsy including the circumstances of death with a copy of the patient case sheet including its medical and surgical notes.

Discussion between the forensic pathologist, surgeon and the

anesthesiologist may sometimes leads to an acceptable conclusion to present to the court in cases where autopsy might reveal little or no valuable information.

Bernard Knight classified the cause of death under surgical intervention in to 4 categories:

- **1-** Those directly caused by the disease or injury for which the operation or anesthetic was been carried out.
- **2-** Those caused by a disease or abnormality other than that for which the procedure was been carried out.
- **3-** Those resulting from an act during or a complication of the surgical or diagnostic procedure.
- **4-** Those resulting from an act during or a complication of the anesthetic being administered.