



## Editorial

### Advances in Diagnostic Techniques and Biomedical Analysis

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Journal of Diagnostic Techniques and Biomedical Analysis is a hybrid open access journal successfully releasing issues on time. It is releasing its issue biannually. Journal solely depends on the quality of article. Journal receives article throughout the world.

Computed Tomography is the research topic is which we publish articles. It is diagnostic technique used to examine the whole body organs also soft tissues. Computed tomography used in the cross sectional scanning process, it is much advanced than the x-ray scanner. The imaging technique where it gives accurate and precise images than other techniques also, it is a painless procedure. Ct scan is also called as computerized axial tomography. It is mainly used in biopsies where lumps of cancer cells can be detected. It is far more advanced technique than the x-ray or radiography. Now a day, it is widely used to take multiple slices imaging or in other words multi-detector technology.

Recent research findings aimed to evaluate (ACTM) automatic tube current modulation technique based on the radiation done and also the image quality of the fixed tube current, both techniques are compared. 50 patients where underwent multiphasic ct scan of hepatic circulatory phases like arterial, portal venous phases. Using ACTM process venous phase is done and using FTC process portal phase is done. Image quality and radiation dose values of the portal and venous phases are compared in the same patients. The image quality evaluated, both phases have same scan length. By using ATCM radiation dose could be reduced by maintaining image quality in multiphasic ct scan of liver.

Autopsy is the examination of the dead person's body. Generally to examine the cause of death, this process is used generally in forensic or diagnostic labs. Autopsy is also called as post-mortem. It is the medical

examination of dead body. Generally, autopsy is performed by pathologists. It states us how and when the death actually occurred. It states us not only the cause of death but also the state of health of a dead body just before the death occurred.

Chromatography is a biochemical technique to separate mixtures by passing them as a solution or suspension through a medium in which the components of the mixture move at different rates. The liquid in which mixture is dissolved to make a solution is called as mobile phase. This mobile phase carries the components of the mixture through the stationary phase. Different components in the mixture travel at different speeds which cause them to separate. Chromatography was first used in Russia by Michael Tsvet to separate plant pigments hence the name is given as chromatography, in Greek chromo means color. Later different types of chromatography have been developed. Broadly chromatography is divided into two types: columnar and planar. It is based on the stationary phase.

Whereas based on the physical state of mobile and stationary phase's chromatography is of two types: gas chromatography and liquid chromatography. Chromatography may also be divided based on the mechanism of separation like size exclusion, affinity, and ion exchange chromatography.

Chromatography is very much useful in detecting abnormal metabolites. Capillary chromatography is used to diagnose various metabolic disorders like glycemic acidosis, lysinuric protein intolerance, mevalonic acidosis, etc. Gas liquid chromatography can be used to detect microorganisms and characterize them through qualitative and quantitative analysis of cellular components, cellular extracts and metabolic byproducts.

Mass spectrometry and high performance liquid chromatography are parts of multi component analytical system to detect human metabolic disorders. Catecholamines are biologically active amines that perform important neural and hormonal functions. High performance liquid chromatography (HPLC) has the advantage of detecting these analyses better than any other techniques. Determining the levels of these amines are useful in diagnosing diseases like Parkinson's disease, hypertension, heart disease, muscular dystrophy etc. Levels of vitamins in the food can be determined by hplc technique. HPLC can also be used for monitoring the glycemic control. The main use of HPLC is high resolution and reproducibility.

Chromatography is not only used in clinical pathology but also in pharmacology, environmental science to detect pollutants, also in food industries.

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