Experiment no.: 15

Experiment name: detection of bile pigment in the urine.

The aim of the Experiment:

Determination of bile pigment using Gmelin’s test.

Bile pigments are oxidized by nitric acid to various colored products e.g biliveridin gives green bilicyanin(blue), bifiuscin (red) and choletelin (yellow).

Equipment and martials used in the Experiment:

- Stopwatch, strip-chart recorder or printer.
- Pipettes to measure reagent and samples.

Property of the machine:

It does not need a machine

Experiment procedure or protocol:

Take 5ml of conc. Nitric acid in a test tube.

Add 5 ml. of urine sample carefully to form a separate layer.

Experiment data and results:

Various coloured rings will be formed at the point of contact of the two liquids (play of colour).

Conclusion:

- What is the role of this experiment?
- How does its deficiency affect the health?
- What are the normal level values?
- How can you determine its quantity on the blood?
- Discuss the methodology?