

## **Histology/Pathology**

Histology involves the study of tissue from various organs of the human body.

The Histology laboratory is responsible for the preparation of tissue for diagnosis by Pathologists. Histology receives tissue or foreign bodies that have been removed by any surgical or interventional procedure. Tonsils, gallbladders, uteri, vas deferens, moles and biopsies of breasts are examples of tissue processed in the Histology department. As soon as the tissue is removed from the body, the tissue is fixed in a special liquid (10% formalin) and sent to the Laboratory.

Histology looks at the specimen and takes sections for processing which involves embedding some or all of the tissue in wax and cutting the tissue on a special instrument (microtome). The microtome produces thin slices of the specimen, which are transferred to slides. The slides are stained with a routine stain (to help differentiate between diseased and normal tissue). They are then delivered to the Pathologist for microscopic examination and diagnosis. Special stains may have to be performed on more complicated cases, to aid in diagnosis.

Sometimes it is necessary for the surgeon to ask for a pathologist's opinion while the patient is under anaesthetic. At this point, tissue is sent from the Operating Room to the Histology department, quickly frozen, cut, and a slide is made within 20 minutes. It must be noted that not all testing can be performed in this manner due to the complexity of the testing methods.