

Development of the pathology specimen navigation system

Hirofumi Inoue

Department of Pathology, Okayama University Hospital

Objective

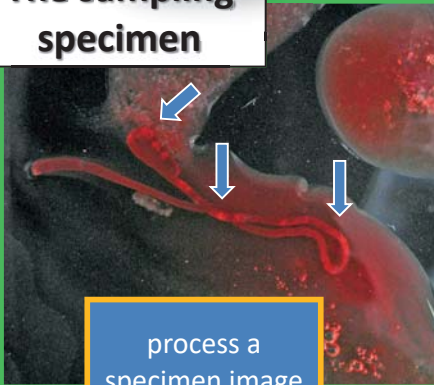
Development of the machine which does not depend on the experience level

What is the pathological examination?



➤ It is very important examination to be given final diagnosis.

The sampling specimen

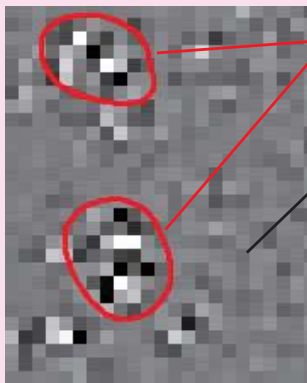


Problems

All the sampling specimens are not a lesion.

* The site which is effective for a diagnosis is illegible
Almost blood components (↓ : Lesion tissue)

* Endoscopic ultrasound-fine needle aspiration biopsy (EUS-FNA)
This endoscope has a supersonic transducer at the tip. This machine can obtain echogram from stomachs. This machine is used for the examination of the pancreas, the lymph nodes in the organ, the alimentary canal mucosa lower lesion.



Nucleated cells

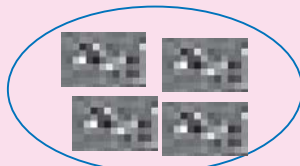
● There is random characteristic on the image.

Blood

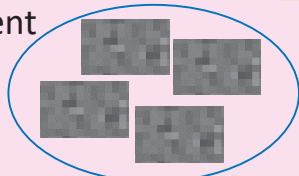
● There is not random characteristic on the image.

Difference in index of refraction
Characteristic of nucleated cells

Class with the characteristic of nucleated cells



Class with the characteristic of the blood component



Mark the characteristic of nucleated cells with blue on the image

