

"INSTANT CYTOLOGY"

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INSTANT CYTOLOGY

Over the years the value of Cytology in the diagnosis and treatment of female genital conditions has become well established. The routine polychrome stain has been an excellent way of treating these slides. The authors in no way wish to suggest that this procedure will supplant the polychrome stains, however wish to add yet another diagnostic tool in what may well be a relatively neglected area.

A factor that has impeded general use of the Cytological techniques by individual practitioners, has been the unavailability of convenient staining. Stains that are commonly used such as the Papanicolaou or Shorr take a moderate period of time. Many authors have modified these stains in the interest of speed. In yet another dimension Riva and Turner have made extensive use of fluorescent microscopy for a rapid examination of Cytological material. This has the disadvantage of requiring special equipment that is of an expensive nature.

The use of a monochrome stain for various Cytological examinations was first established in 1949. Although generally neglected several authors have from time to time used this technique for such things as:

1. Staining for trichomonads
2. Chromosomal Sex Determination
3. Endocrine Evaluation
4. Cyto-Diagnosis of ruptured membranes
5. Hormone Evaluation
6. Cervical Cytology

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In a busy office or clinic practice, there can be considerable value obtained from immediate examination of Cytological Smears. When hormone therapy is to be gauged, it will be found that the described procedure will correlate with endometrial biopsies in approximately 93% of cases. "Fern" patterns are readily visible. Morphological identification of some bacterial problems is aided. Dysplastic and neoplastic cells from the cervix may be easily identified.

Staining of other materials can be done with no modification of the stain. Stained urine sediment can be easily examined. A stained blood film can be likewise examined and the leucocytes studied for nuclear sex determination. Vernix cells have been identified from amnionic fluid, in cases of ruptured membranes.

This interesting technique would seem to be applicable on a larger scale than it is at present. Its flexibility appears unique.

The stain is prepared by making a 0.5% solution of Pinacyanole in 70% Methanol. Staining time is 10 seconds followed by an immediate tap water rinse-- the slide is then ready to read.

(#622 Pinacyanole (Chloride) is supplied by Distillation Products, Division of Eastman Kodak Company, Rochester 3, New York.)

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