Papanicolau-OG-6

It is a multichromatic cytological stain.

**Composition**

**Ingredients**

- Orange G-6 Certified: 0.3 gm
- Phosphotungstic acid: 0.015gm
- Denatured alcohol: 100.0ml

**Formula adjusted, standardized to suit performance parameters**

**Directions**

Fixation: Do not allow smears to dry and fix immediately in 95% alcohol for 5-15 min. The smears may be left in the fixative for 3 days if necessary, but prolonged fixation affects the staining reaction.

1) Rinse in 70% alcohol, 50% alcohol and distilled water.
2) Stain in Harris haematoxylin (without acetic acid) for 5 -10 minutes.
3) Rinse in distilled water.
4) Rinse 3 or 4 times in 0.5% aqueous solution of hydrochloric acid.
5) Rinse thoroughly in water.
6) Leave for 1 minute in a weak solution of lithium carbonate (3 drops saturated aqueous solution / 100 ml water). Rinse thoroughly in water.
7) Rinse in distilled water, 50% alcohol, 70% alcohol, 80% alcohol and 95% alcohol.
8) Stain for 1 minute in the Papanicolau Orange G-6 (S035) solution.
9) Rinse 5-10 times in each of two jars containing 95% alcohol.
10) Stain in Papanicolau EA36 (S036) for 2 minutes.
11) Rinse 5-10 times in each of three jars containing 95% alcohol (not the same alcohol that was used after orange G-6 solution).
12) Rinse in absolute alcohol, then in a mixture of equal parts of absolute alcohol and xylene and then in xylene.
13) Mount in any satisfactory neutral medium and observe under microscope.

**Principle And Interpretation**

Pap stain is used to differentiate cells in smear preparations of various bodily secretions. Pap stain is a very reliable technique. As such it is used for cervical cancer screening. Malignant cells are characterized in general by relatively large nuclei with an abnormal chromatin pattern and small amounts of cytoplasm. They are characterized by the presence of prominent nucleoli, by a marked variation in size, shape and staining property and also by being usually hyperchromatic and by exhibiting atypical or irregular mitoses. Cancer cells may be found by the smear technique in imprints of punch biopsy material and in smears of cervical cells, vaginal secretion (1), prostatic secretion (2), urine, gastric contents, bronchial aspirations, cavity fluids and sputum. A diagnosis of malignancy made from stained smears should be considered tentative and should be checked by tissue sections.

**Quality Control**

**Appearance**

Orange coloured solution.

**Clarity**

Clear, without any particles.

**Microscopic examination**

Staining of malignant cells is carried out and staining characteristics are observed under microscope by using oil immersion lens.
Results
Nuclei - Blue
Cytoplasm - Pink to pale pink

Storage and Shelf Life
Store below 30°C in tightly closed container and away from bright light. Use before expiry date on label.

Reference