MICROPHOTOGRAPHY BY MOBILE SIMPLIFIED

- DR. SANJEEV Y. PATWARDHAN
  M D Pathology
MICROPHOTOGRAPHY BY MOBILE

Most of us have tried taking microphotographs by mobile camera....

- We need to hold mobile with steady hands; little away from eyepiece align and focus optics and click...
- Quite tricky and skilled to start with.
- Requires practice, patience and time
SIMPLE AND EASY SOLUTION

• ADAPTOR....

• Just cut and cut top and bottom of suitable pet or plastic bottle which fits eyepiece ...

• Trim edges for finer focussing

• Touch mobile camera to edge of adaptor and click.
MICROPHOTOGRAPHY BY MOBILE

• With little practice you can capture microscopic images and share those using suitable app.
Tips

- Judge distance between mobile cam and eyepiece lens required for your system, and then cut top of bottle.
- Distance should be around 15 mm
- 30-40 ml medicine pet bottle are likely to fit our requirement.
- Mobiles with top centre cam are easier to work with.
FEW IMAGES CAPTURED

- With Labomed vision 2000 microscope and micromax canvas 2 mobile....

1. Hypersegmented polymorph
2. Cysticercosus larva
3. Intraduct carcinoma
HANDS FREE DISPLAY SYSTEM

Still you need to hold mobile against adaptor, focus and click....

- But with further innovation

- We can make hands free display system easily.

- Just find your mobile box, glue and thermocole pieces.
Making display box....

- Holding bottle in hand...
  mark bottom of mobile box
  to align camera hole of mobile tray

- Cut the hole in bottom
- Put the bottle in hole as shown.
- Fix with thermocole piece and glue
HANDS FREE DISPLAY SYSTEM

Display system looks like this

- Now put that box around eyepiece....
- Place mobile to align camera hole in tray
- Adjust packing to get perfect display.
- Fix with glue.
- And you are

“READY FOR THE SHOW”
Display system

- Cost free - don’t spend single paisa.
- Fine quality of images
- Excellent system for teaching
- Capture and share images
- Get opinion from colleagues.
- Store images for documentation.
- Print with reports
- View on larger screens.
- Innovate as per your requirements
Hematology
Clinical pathology
Hookworm egg

Microbiology AFB:
Cytology: Epitheloid granuloma

Cytology: Suspected synovial sarcoma.
Duodenal biopsy:
Can easily count number of lymphocytes / 100 enterocytes

Breast lump:
Tubular adenoma showing compactly arranged glands.
Intestinal biopsy: Villi showing goblet cells

Intestinal biopsy: Zooming: extra enlargement with mobile
Thank you