MELANIN BLEACH

PURPOSE: When melanin pigment is present in large amounts, cell detail may be obscured. Also the ability to be bleached, serves as an identifying factor for melanin.

CONTROL: Two identical sections, one is bleached the other is not.

FIXATION: 10% formalin

TECHNIQUE: Cut paraffin sections 4µ.

EQUIPMENT: Rinse all glassware in DI water, coplin jars

REAGENTS:

Potassium Permanganate: 1% Oxalic Acid:
Potassium permanganate 0.15 gm See Retic
0.3% sulfuric acid 50.0 ml CAUTION: Avoid contact and inhalation
Make fresh, discard after use.

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SAFETY/ PPE: Wear nitrile gloves, goggles and lab coat, avoid contact and inhalation.

Potassium permanganate: Skin and eye irritant, ingestion will lead to severe gastrointestinal distress. Strong oxidant.

Sulfuric acid: Strong irritant to skin, eyes and respiratory system. Inhalation can produce target organ effects on skin, respiratory, reproductive and fetal systems. Corrosive.

Oxalic acid: can cause severe burns of the eyes, skin or mucous membranes. Toxic by inhalation and ingestion. Target organ effects on kidneys and cardiovascular system, repeated exposure can cause dermatitis. Corrosive.
MINERALS AND PIGMENT

MELANIN BLEACH

PROCEDURE:
1. Deparaffinize and hydrate to distilled water.
2. Slide for bleach: potassium permanganate solution, 2-4 hours.
4. 1% Oxalic acid, 1-2 minutes, or until colorless.
5. Wash in tap water.
6. H & E stain both slides simultaneously.
7. Dehydrate, clear, and coverslip.

RESULTS:
If the pigment is melanin it will not be present on the slide that was bleached.

NOTES: Tissue has a tendency to fall off, use coated slides, if using celloidin it must be applied after step 2.

REFERENCES:
Crookham, J, Dapson, R, Hazardous Chemicals in the Histopathology Laboratory, 2nd ED, 1991, Anatech

Prepared: ___________________________ By: ________________

Approved: __________________________ By: ________________
PROCEDURE CARD

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H&E set-up