

Pathology Core Protocol



Protocol Section: General Procedures

Policy No: P-CMHD1-SMALL-00

Protocol Subject: Small specimens

Effective Date:

Date Reviewed: 6 January 2003

Date Revised:

Small Specimens (<0.2 cm in any dimension)

Because of their small size, these specimens require special care during processing. It is possible for these specimens to be lost or disintegrated in fluid exchanges during dehydration, clearing or paraffin infiltration. Even by wrapping the specimen in a piece of lens paper is not fully adequate since occasionally the smallest specimens are lost.

There are three procedures which are described as follows and are adopted in the core research histology laboratory. The type of method to use will entirely depend on the nature and size of the specimen. The third technique seems to be most adequate and safe to use for most of the small specimens.

1) Put specimen on slide after it is fixed. Drop Harris hematoxylin on the specimen and leave for one minute. Wrap and process on automatic tissue processor as usual. The hematoxylin will permanently color the specimen and therefore render it more visible during paraffin embedding.

2) Put specimen on slide after it is fixed. Drop Harris hematoxylin on specimen for 30 sec. - 1 min. Drain off excess hematoxylin from specimen and leave it in few drops of tap water for 5 minutes. Drain off the water and mount with aqueous mounting medium.

3) Agar-paraffin embedding technique. First color specimen by either fixing in Bouin's fluid or by using hematoxylin as in method (1). Orient specimen on the bottom of a small embedding metal mold. Pour a small quantity of 3% Agar solution onto the bottom of the mold. Place the mold on a cold plate at 4°C to solidify the agar and to prevent changes in tissue orientation. The solidified agar block is lifted out of the mold and excess agar is trimmed away with a scalpel. Put the agar blocks in a paraffin cassette which can be processed along with other specimens in an automatic tissue processor. For further details on procedure, please refer to lab manual.

REFERENCE: In compliance with the Ontario Lab Licensing Regulations.

Issued by Lab Manager: _____ **Date:** _____

Approved by Facility Management: _____ **Date:** _____