The Reverse Slide Mount Method

ASMH Power Point Presentation by Jeanie Wade

- Hi Everyone. Isn't it amazing how many different methods there are to acquire the same outcome? Well, today, I would like to share with you information about the "Reverse Slide Mount" method. This is an inexpensive, yet precise option for embedding. I like the fact that you can view the specimen from both the top and bottom sides of the tissue, thus ENABLING YOU TO SEE THE SPECIMEN FROM ALL ANGLES
- 2. There are many options and methods available for embedding Mohs specimens, but the primary goal is to provide a quality representative "complete" margin of the area of the specimen that last came in contact with the patient.
- 3. When we process Mohs specimens, regardless of which embedding method we choose, It all begins at the grossing station. To me, Mohs is "Art in Action" and this is my art table ©.
- 4. And this is my grossing board. This is where the artistic features begin. By using the correct grossing supplies, we are able to sculpt (bi-sect, multisect, score and relax the tissue) and paint (apply color coded ink to designated orientation areas).
- 5. Other items I use for the Reverse Slide mount method are freeze spray, inexpensive glass slides, quality forceps, gauze and embedding medium.
- 6. This is an example of a specimen that was transported from a procedure room back to the Mohs lab. The map serves as a patient identifier for the specimen as the tissue was being transported from one location to another.
- 7. So now that we have our specimen, it is **TIME TO SHOW YOUR CREATIVE ARTISTIC ABILITIES!!** You want to think outside the box, think creative and have fun!
- 8. First I want to SECTION the SPECIMEN ACCORDING TO MAP ORIENTATION
- 9. Using your grossing forceps, I separate my pieces and ORIENT SPECIMEN FOR INKING PROCESS
- 10. Now I am going to CAREFULLY APPLY INK WITH POINTED TIP APPLICATOR STICK
- 11. At our office, we use Black for Superior, Blue for inferior, and green to indicate the right side of the specimen. **COLOR CODED INK APPLIED AS INDICATED ON MAP**
- 12. Now my specimen INK MARGINS are COMPLETE
- 13. Next, you will want to CAREFULLY BLOT the tissue TO REMOVE EXCESS INK
- 14. Now that the **EXCESS INK REMOVED**, you will notice that the smudged ink inhibits your view of the tissue.
- 15. Here, the **SPECIMEN** has been **RELOCATED TO CLEAR AREA OF GAUZE.** You will notice that now I have a clear view of the epidermis margin.
- 16. Using an 11 blade, I apply a relax cut in specific areas to enable me to transition the epidermis to an even plane. This is the superior edge of piece 1.
- 17. now I relax the inferior edge of piece 1.
- 18. Rotate gauze and apply relax cut to the Inferior edge of piece 2.

- 19. And then the Superior edge of piece 3.
- 20. Now that relax cuts have been applied, I will **SCORE FROM ONE RELAX CUT TO THE OTHER** on both pieces of tissue.
- 21. Using my forceps and the tip of my 11 blade, I can **TEST RELAX CUTS AND SCORES** (ANY RESISTANCE INDICATES ADDITIONAL SCORING IS NEEDED)
- 22. Now that my tissue is ready for embedding, I will apply a small amount of embedding medium to my embedding slide.
- 23. Then I will smear the embedding medium on piece1 slide to piece 2 slide to evenly spread it out.
- 24. Now my slides are ready to place the tissue on them.
- 25. PLACE SPECIMEN ON SLIDE FOR TRANSPORT from the grossing area TO the CRYOSTAT
- 26. **SET GUIDELINES FOR EPIDERMIS PLACEMENT** At our office, we place our epidermis to the left.
- 27. Now I take one section of tissue off of the embedding slide and PLACE it ON a CLEAN GAUZE ON TOP OF CYROSTAT
- 28. SMOOTH EMBEDDING MEDIUM to prevent raised areas.
- 29. SPRAY BACK SIDE OF SLIDE
- 30. And JUST LIKE HIS TONGUE STUCK TO THE FROZEN POLE.....
- 31. YOUR SPECIMEN WILL ADHERE TO THE FROZEN SLIDE ⁽³⁾ (I USUALLY START AT ONE TIP) ***focus on epidermis first, not deep margin
- 32. CONTINUE TO PLACE EPIDERMIS DOWN
- 33. Here we are ALMOST THERE
- 34. Now we have our EPIDERMIS DOWN
- 35. Holding the embedding slide at eye level, **CONFIRM EPIDERMIS MARGIN**. If you see any area that needs additional attention, you can gently warm specific locations for additional transition of specimen.
- 36. Now that I have my EPIDERMIS DOWN, I can FOCUS ON the DEEP MARGIN
- 37. CAREFULLY TEASE DOWN DEEP MARGIN with your embedding forceps.
- 38. Now you can see that your **DEEP MARGIN** is **DOWN**
- 39. **SPRAY BACK SIDE OF SLIDE** to ensure specimen will remain frozen to slide when you apply embedding medium. Place slide inside cryostat chamber and prepare chuck.
- 40. I am going to use a **ROOM TEMPERATURE CHUCK (NOT PRE-CHILLED)** to prevent popping off of the block.
- 41. Place the chuck in desired location for the heat extractor
- 42. Apply embedding medium to the chuck
- 43. Quickly pick up slide with frozen specimen and apply embedding medium around tissue.
- 44. Now you will need to work quickly to prevent the epidermis from lifting.
- 45. Pick up your freeze spray can and quickly spray the top side of the embedding medium to prevent it from running off when you flip it over to spray the back side of the slide.
- 46. Flip and spray the back side of the slide.
- 47. Continue with light flow of freeze spray until embedding medium appears solid in color.
- 48. Now your specimen is secured inside the embedding medium.
- 49. Add a additional embedding medium to chuck to ensure quality bond
- 50. Reverse the slide on to the chuck

- 51. And apply heat extractor.
- 52. Your embedding process is now complete
- 53. The "Reverse Slide Mount" method allows you to see your complete deep margin, epidermis and orientation through the glass.
- 54. Have you ever baked a cake, and when you went to flip it out, it tore the cake? But if you prepped the pan first, it would come out clean.
- 55. Remember the layer of embedding medium that we placed on the slide prior to embedding? Well.....
- 56. **THE LAYER OF EMBEDDING MEDIUM ALLOWS YOU TO SAFELY** pop off **THE SLIDE** off without tearing the tissue.
- 57. **THE TISSUE** remained **IN TACT**, and you can see the area where the embedding medium barrier came off the slide in this circular area.
- 58. And that is the "Reverse Slide Mount Method". Allowing you to acquire a complete representative section. ☺
- 59. So **This Concludes The Reverse Slide Mount Method.** I hope you found this information helpful.
- 60. I would like to express my appreciation to the ACMS Physicians, Nursing Staff and Laboratory Personnel of Dermatology Associates of Tyler for your support with the preparation of this presentation. It is an honor to work with such talented individuals that strive for quality patient care every day!

Thank You!