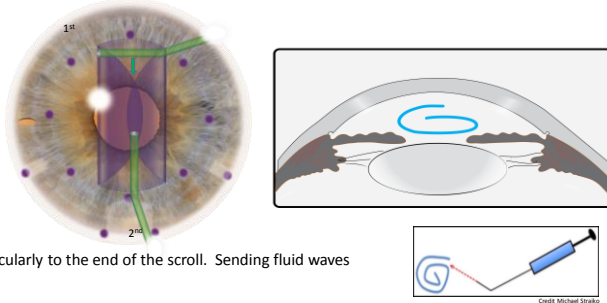


DMEK: Graft Conformations and Opening Strategies

Scroll



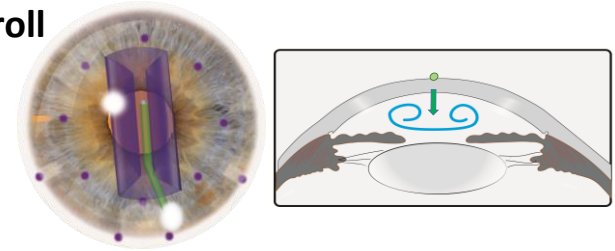
To Open:

- Try tapping perpendicularly to the end of the scroll. Sending fluid waves into scroll to open it.
- Tap vertically and centrally, aligned with the long axis of the scroll. Skew your tapping to the more open or more peripheral end.
- If the scroll is tight, consider using a cannula/BSS to "flip open" one edge. Alternatively, a Fogla cannula (opening on sides) can be inserted into scroll and BSS used to push the graft open.

Most likely next conformation(s):

1. Simple Fold (most likely)
2. Bouquet
3. Double Scroll

Double Scroll



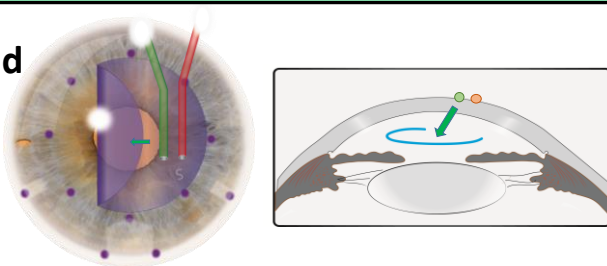
To Open:

- Tap directly down on the center of the graft along the long axis.

Most likely next conformation(s):

1. Simple Fold (most likely)
2. Bouquet (if eccentric tapping)

Simple Fold



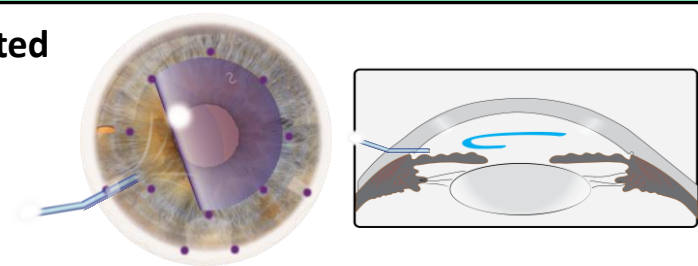
To Open:

- Use a two cannula Dirisamer technique.
- The Red Cannula is stationary and mildly compressing the cornea.
- The Green Cannula is dynamic. Tap just to the open side of (not on top of) the folded edge. You can direct your taps slightly toward the fold.
- Continue to advance your dynamic cannula (Green) until the graft has opened completely, taking breaks to recenter as needed.
- No alternative option here as this "always" works.

Most likely next conformation(s):

1. Edge Fold

Inverted



To Flip:

- Note the confirmation of the graft (backwards S).
- Inject small and sequential bursts of BSS along the iris plane.
- Use the BSS to "push" the folded edge around and thus roll the graft over.
- If a shallow AC is maintained, the graft will remain unscrolled.

Most likely next conformation(s):

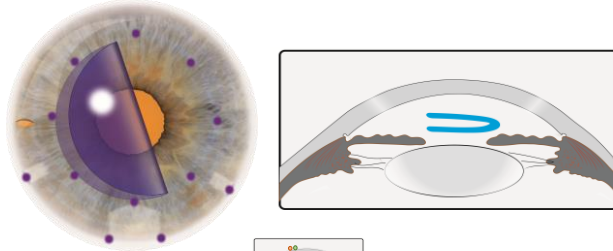
1. Scroll
2. Simple Fold



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DMEK: Graft Conformations and Opening Strategies

Taco(s)



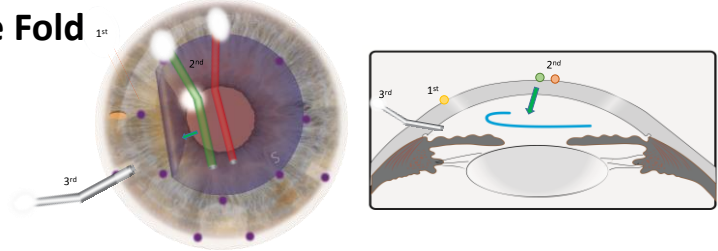
It Depends:

- Smaller side on the top (40/60 Taco or "Simple Fold")
Open with Dirisamer
- Smaller Side on bottom (60/40 Taco or "Inverted")
This graft is Inverted.
Jet BSS along iris surface to roll the graft over.
- Even Fold (50/50 Taco or treat as "Inverted")
No way to open with tapping.
Jet BSS along iris surface to roll the graft over.



- Most likely next conformation(s):
1. Simple Fold
 2. Scroll (if deepen AC with BSS)
 3. Origami

Edge Fold ^{1st}

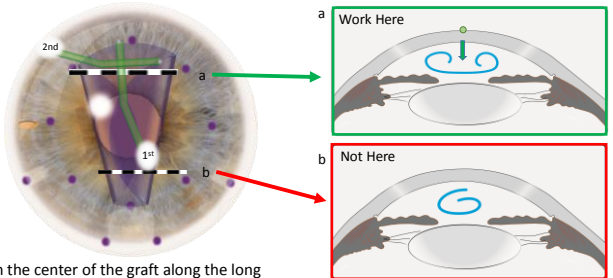


To Open:

- Slowly indent the cornea peripheral to the edge fold (Orange) and then quickly release to "pull" the edge open.
- Use a Dirisamer technique (Red and Green) or simple tapping (Green only) to open the fold.
- Burp aqueous from an existing wound (Gray) to "pull" the edge open. This may require rotating the graft (sweep the cornea along edge of graft in a path that is tangential to the limbus).
- If the fold is very small and the graft is centered, just go ahead and place a moderate size gas bubble.

- Most likely next conformation(s):
1. DONE!

Bouquet

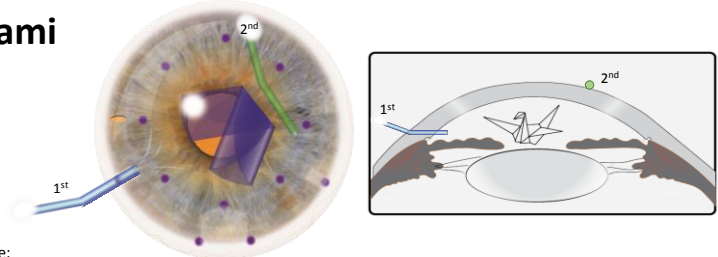


To Open:

- Tap directly down on the center of the graft along the long axis. Skew tapping toward the more open end ("a"), treating it as if it were a double scroll.
- Tap at open end ("a"), perpendicular to long axis and march taps centrally as graft opens. This maneuver takes advantage of the asymmetry of this conformation.

- Most likely next conformation(s):
1. Simple/edge Fold(s)

Origami



To Resolve:

- Deepen the anterior chamber with BSS through a para, using the BSS current and space created to help re-orient the graft.
- Tap along apex or inside of the fold and it should straighten out into a scroll (deep chamber required).

- Most likely next conformation(s):
1. Scroll



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