Optional Use of CTRs in Eyes with Weak Zonules

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How to keep good QOV
In cases of weak zonules

- Keep small incision size (less astigmatisms)
- Use Capsule Device (CTR, Capsule retractor etc)

Capsular Tension Rings (CTRs)
- Great device in complicated cataract cases
- First introduced in 1991 by Hara et al, and was implanted in the first human eye in 1993 by Witschel and Legler.
- Various designs (e.g., standard, Cionni Rings for Sclera
- Fixation, Ahmed Capsular Tension Segments (CTSs))

Methods of CTR insertion in these cases

1. Tie a thread into the hole of the CTR, and insert the CTR into the capsular bag.
2. Cut the thread, if the CTR–capsule complex is stabilized.
3. Remove the CTR by pulling thread if the zonule strength is insufficient.
Case: 67 y.o. Female Marfan syndrome

Using CTR with thread in cases with weak zonules

- CTR with tied thread is useful and easy to use.
- The use of capsule retracting device with this CTR facilitates phacoemulsification during surgery.

Case: 73 y.o. male with glaucoma

CONCLUSION

- CTR is useful tool to achieve good QOV because of less astigmatism post-operatively.
- Knowing the optional use of CTR can be of great help when one encounters unexpected zonular problem.