

Continuous Irrigation Technique for improved visualization in Fetoscopic Laser Surgery with dull and bloody amniotic fluid.

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Objective:

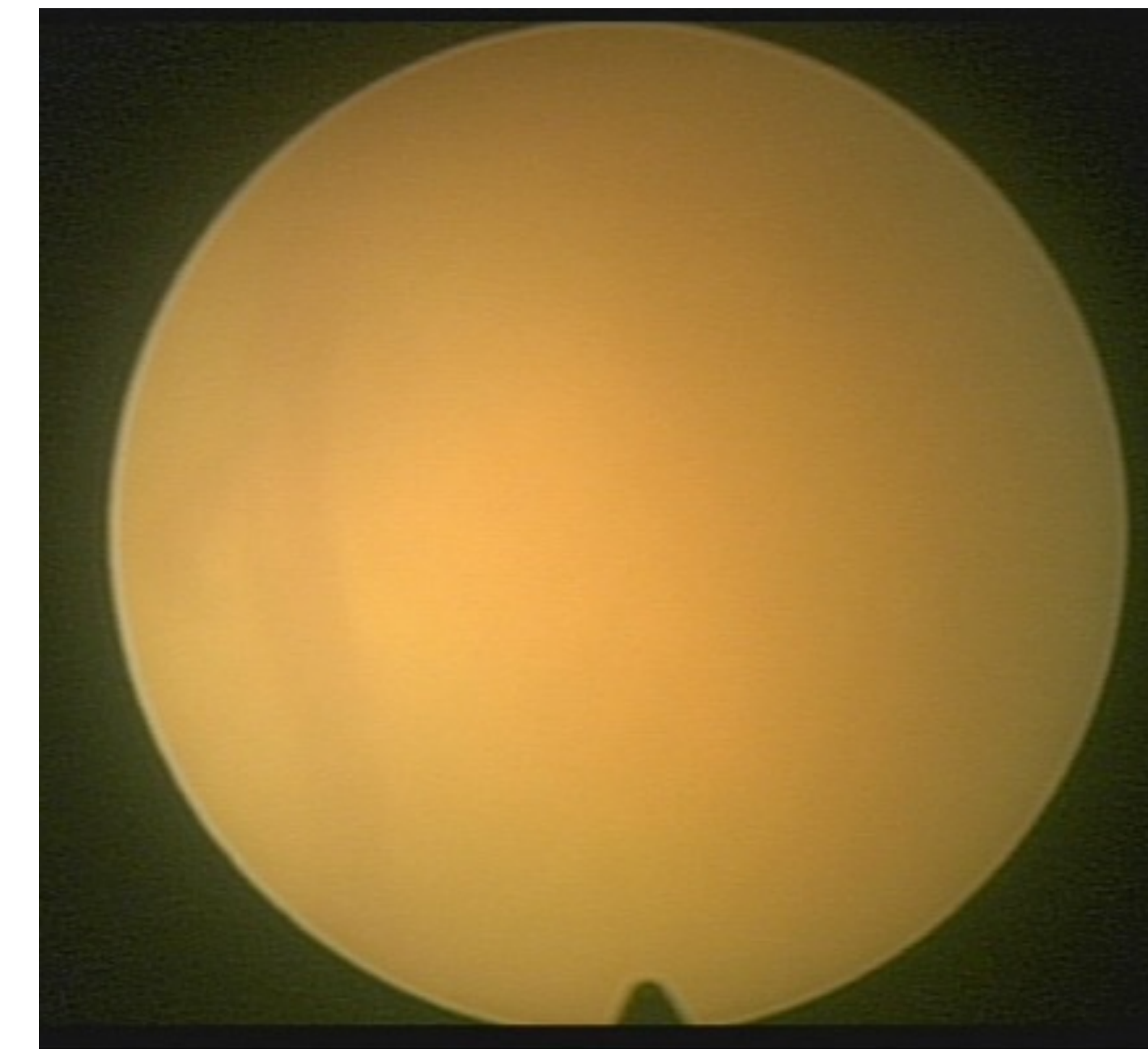
To evaluate the efficacy of continuous irrigation technique (CIT) to improve visibility of dull and bloody amniotic fluid for fetoscopic laser surgery (FLS).

Methods:

- From 2008 to 2024
- FLS with CIT for 15/222 consecutive cases of complicated MC twin pregnancies with severely discolored amniotic fluid
- Warm saline was continuously irrigated (10-20 mL/min) to improve visibility

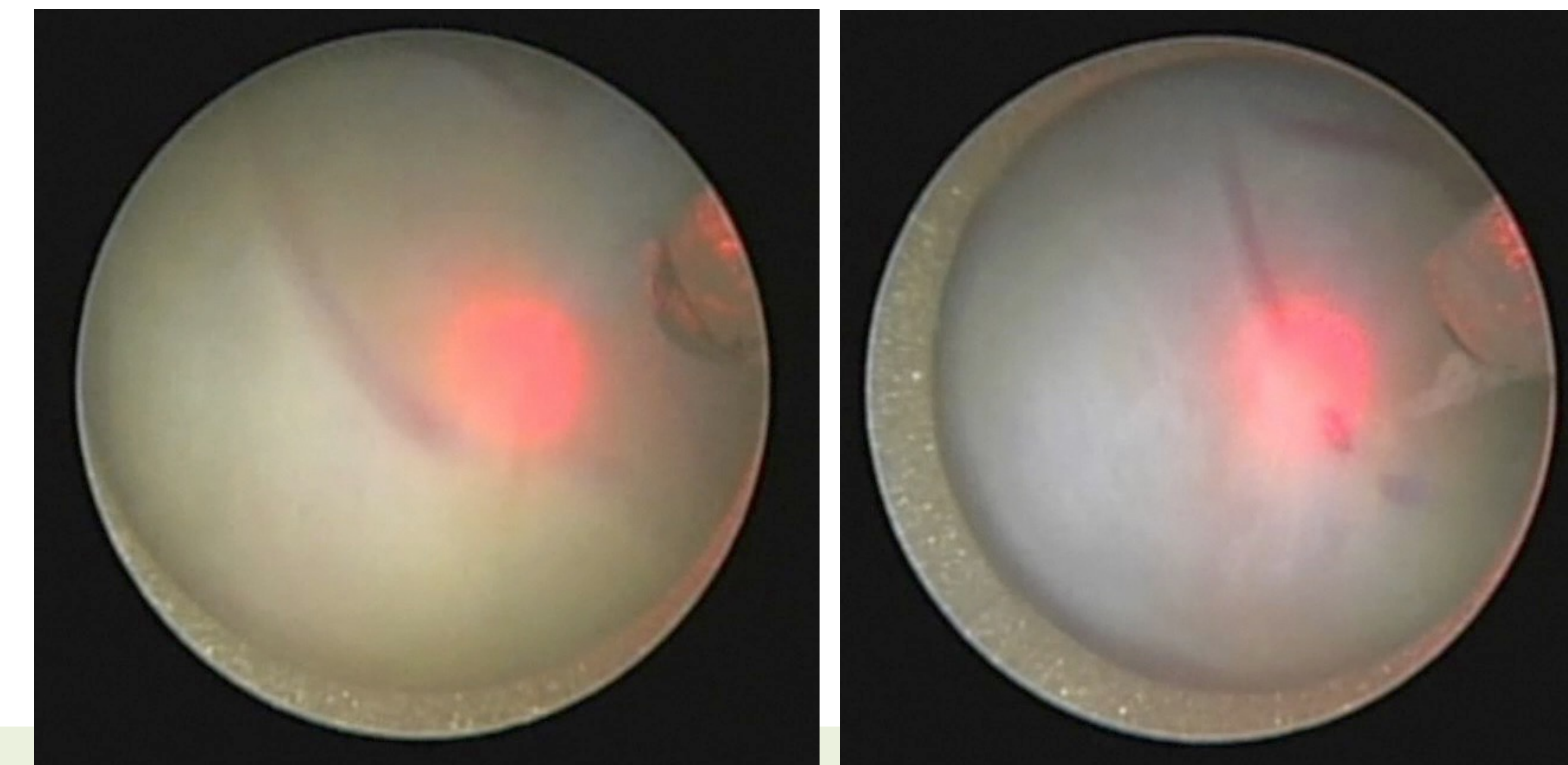
Results:

- All 15 cases (12 TTTS, 1 SFGR, 1 TAPS, 1 cord entanglement in MCMA) were successfully treated with CIT-assisted FLS without maternal and fetal complications.
- GA at FLS: 20 wks (16-24 wks.), Time: 76 min (35-139 min), Anterior placenta 7/15, Volume 442 mL (110-2100mL).
- Fetal symptoms resolved in all cases, GA at delivery 31 wks (23-37 wks.)
- 70% of fetuses survived (7 with single fetal demise, 1 with double demise).
- 2/15 placenta showed residual anastomoses without symptom of TAPS and recurrent TTTS (a small thin anastomoses located at the placental margin, the other one diverged from velamentous cord insertion)



*Dull and Bloody
before Continuous Irrigation Technique*

During Continuous Irrigation Technique



Conclusion:

Continuous Irrigation Technique enhances visualization during FLS, enabling successful treatment of complicated MC twin pregnancies even with severely discolored amniotic fluid. Further refinements may improve surgical outcomes.