

LASER ASSISTED LIP REPOSITIONING FOR REBALANCING OF ASYMMETRICAL GUMMY SMILE



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Objective

To present a clinical case demonstrating the effectiveness of laser-assisted lip repositioning in the management of asymmetrical excessive gingival display, emphasizing:

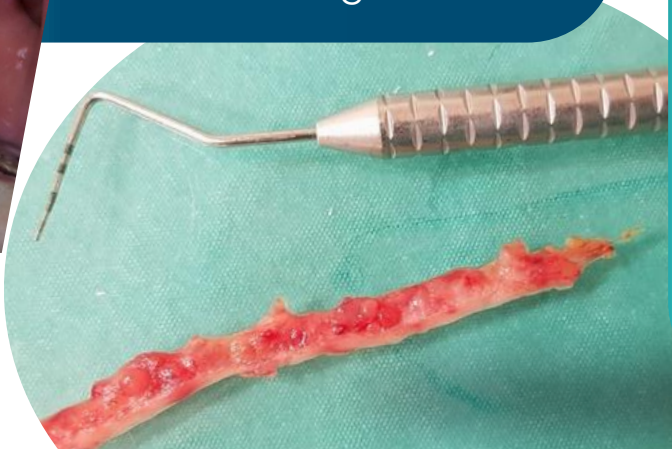
- surgical protocol,
- esthetic outcomes,

and advantages over conventional techniques in cases with muscular imbalance



Case description

- Patient: 24-year-old healthy female
- Chief complaint: Excessive gingival exposure during smiling
- Clinical findings:
 - No skeletal or dental anomalies
 - Asymmetrical upper lip elevation
- Increased pull of the left alar facial crease
- Diagnosis: Asymmetrical gummy smile of multifactorial muscular origin



Surgical procedure

- Anesthesia: Local infiltration
- Laser system: Er:YAG laser with chisel tip
 - Laser settings:
 - Energy: 220 mJ
 - Frequency: 15 Hz
 - Power: 2.5 W
 - Pulse mode: Medium Pulse
- A horizontal strip of mucosa was excised from the maxillary vestibule.
- Controlled lowering of the upper lip was achieved.
- Additional intraoperative muscle suturing was performed to depress:
 - levator labii superioris*
 - levator labii superioris alaeque nasi* on the left side.

Clinical outcomes

Clinical Outcomes

- Excellent intraoperative visibility and precision
- Minimal bleeding and reduced surgical trauma
- High patient comfort during and after the procedure
 - Uneventful postoperative healing
 - 4-week follow-up:
 - Significant reduction in gingival display
 - Improved smile symmetry
- High patient satisfaction with esthetic outcome

Conclusion

- Laser-assisted lip repositioning proved to be a predictable, minimally invasive, and well-tolerated technique.
- The use of Er:YAG laser improved surgical control while minimizing patient morbidity.
- LALR represents a viable alternative to more invasive surgical procedures in appropriately selected patients, especially in cases of asymmetrical gummy smile.

