THE ROLE OF LASER SURGERY IN THE TREATMENT OF UPPER AIRWAY STENOSES

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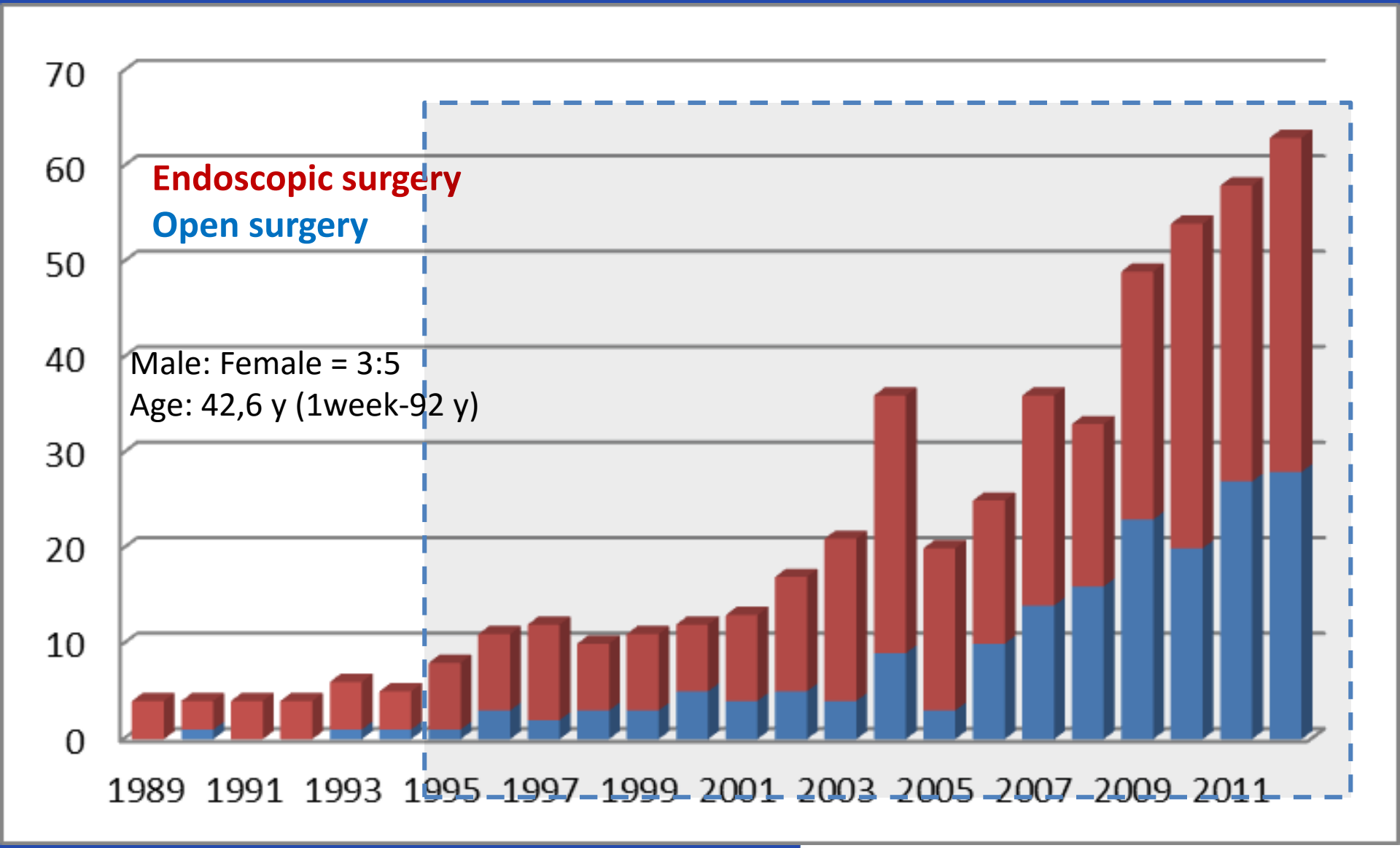
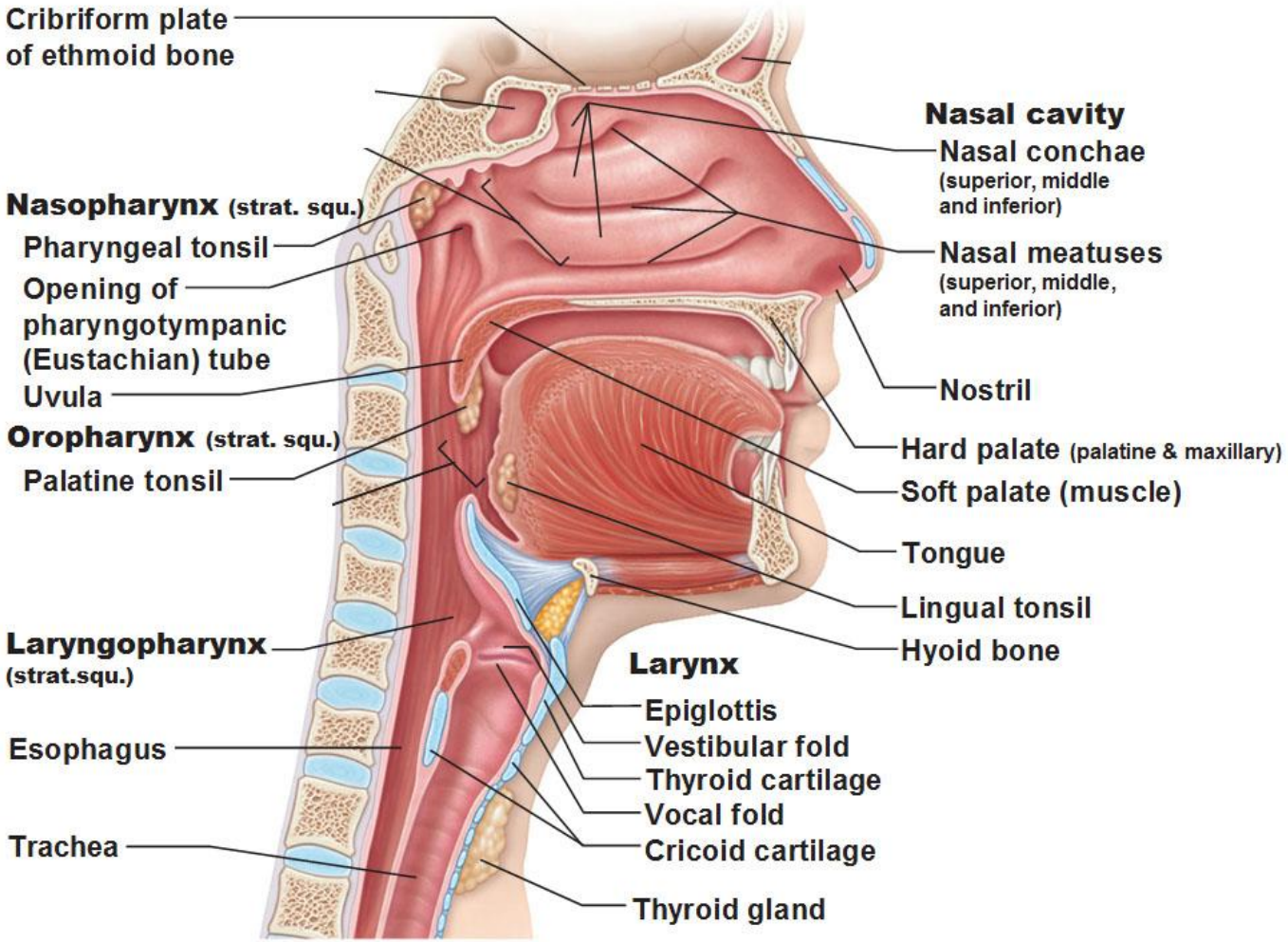
Upper airway stenoses (n=516)



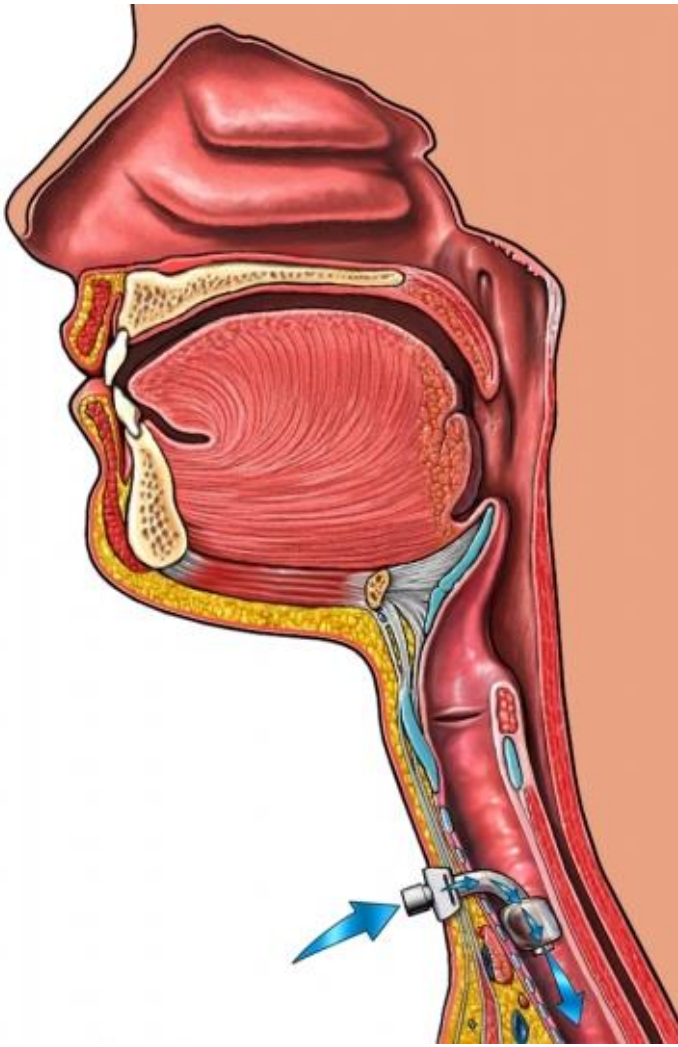
UPPER AIRWAY STENOSES

The Upper Respiratory Tract

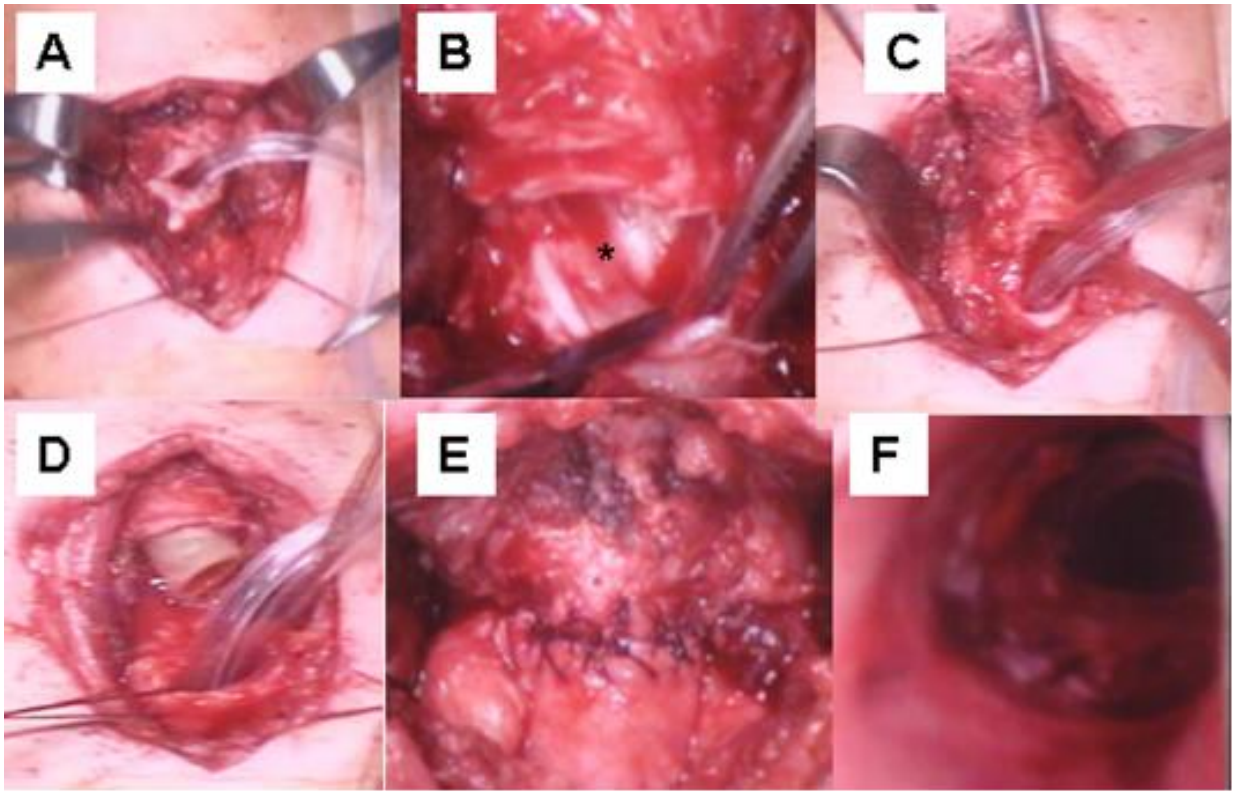


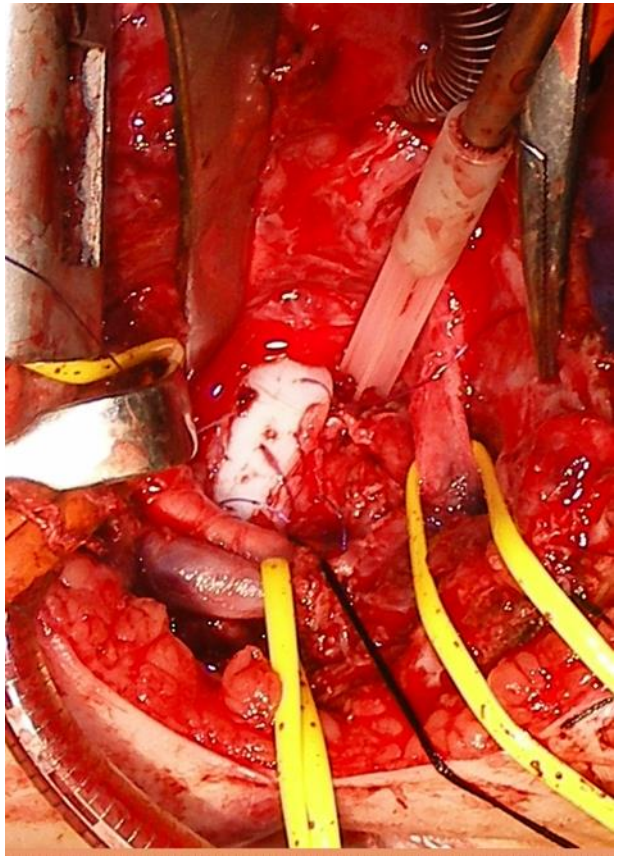
UPPER AIRWAY STENOSES

TRACHEOSTOMY

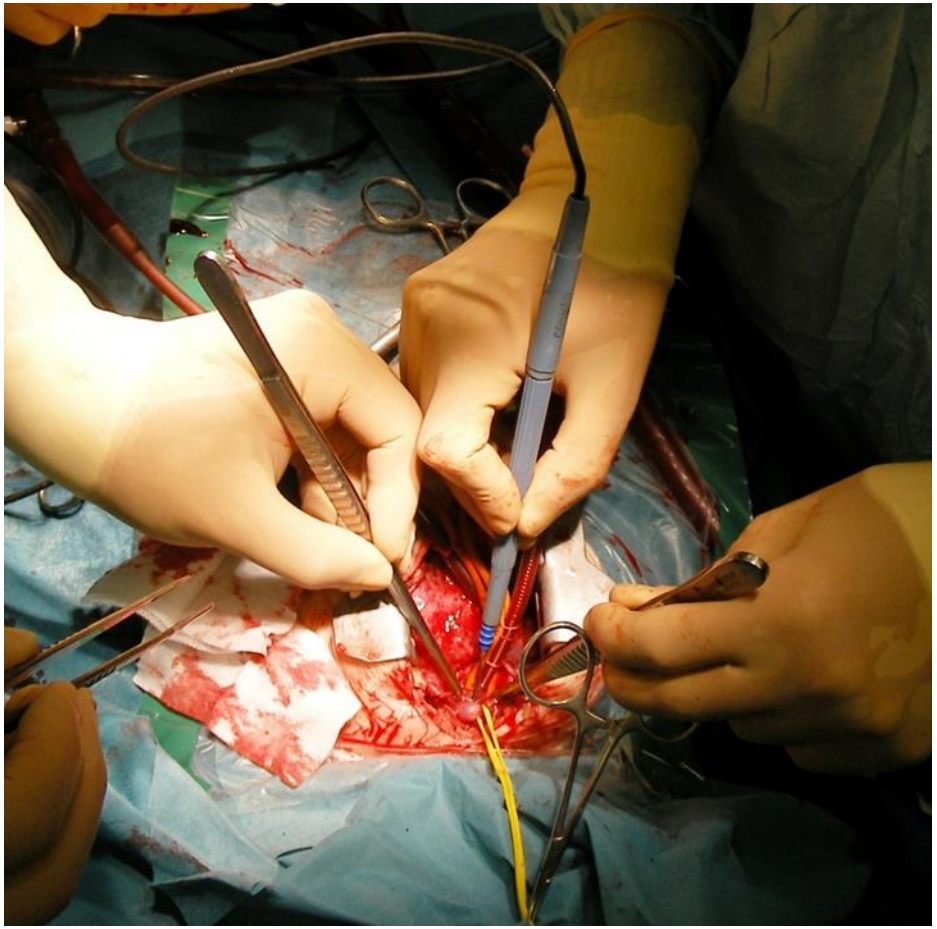


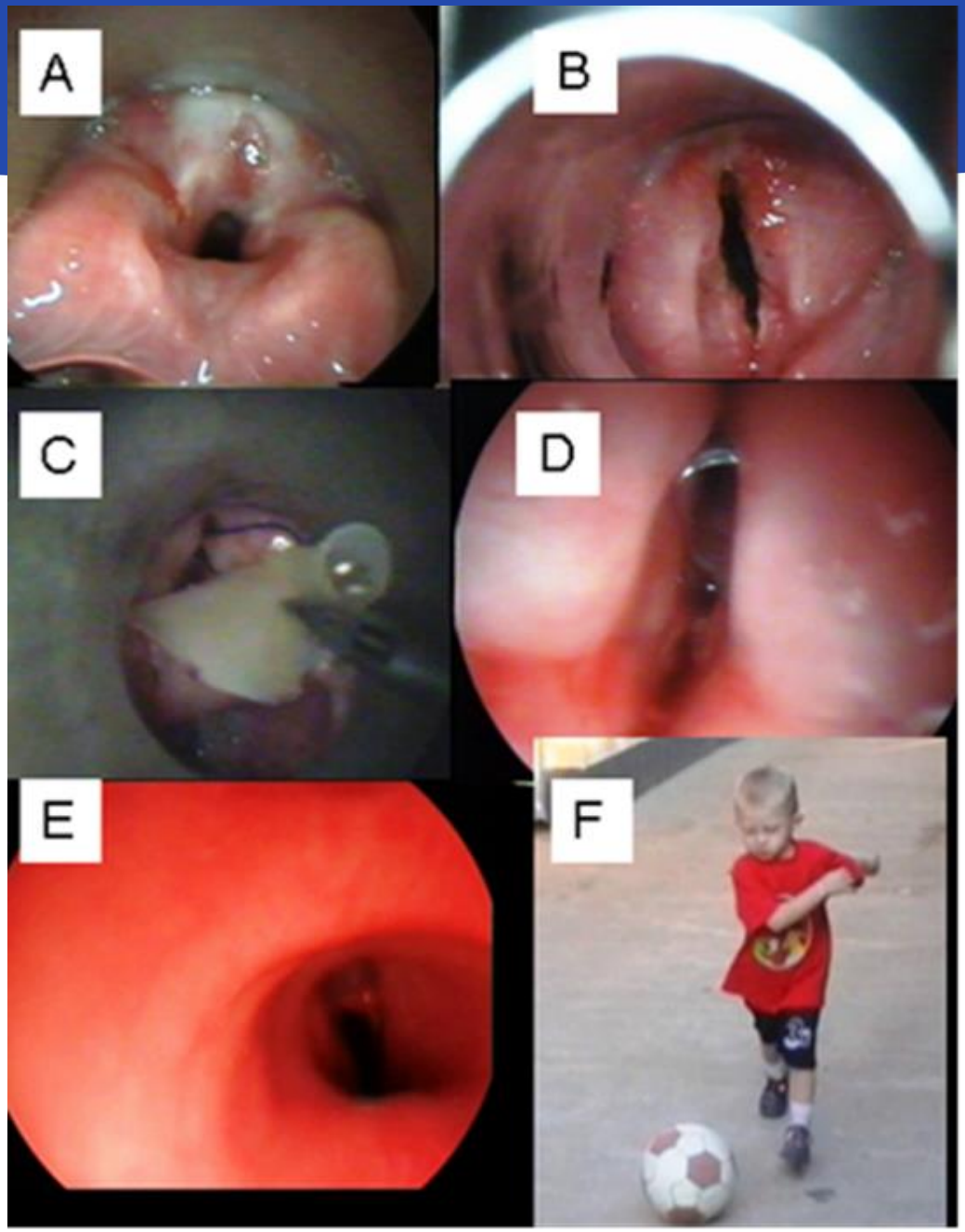
OPEN SURGERY



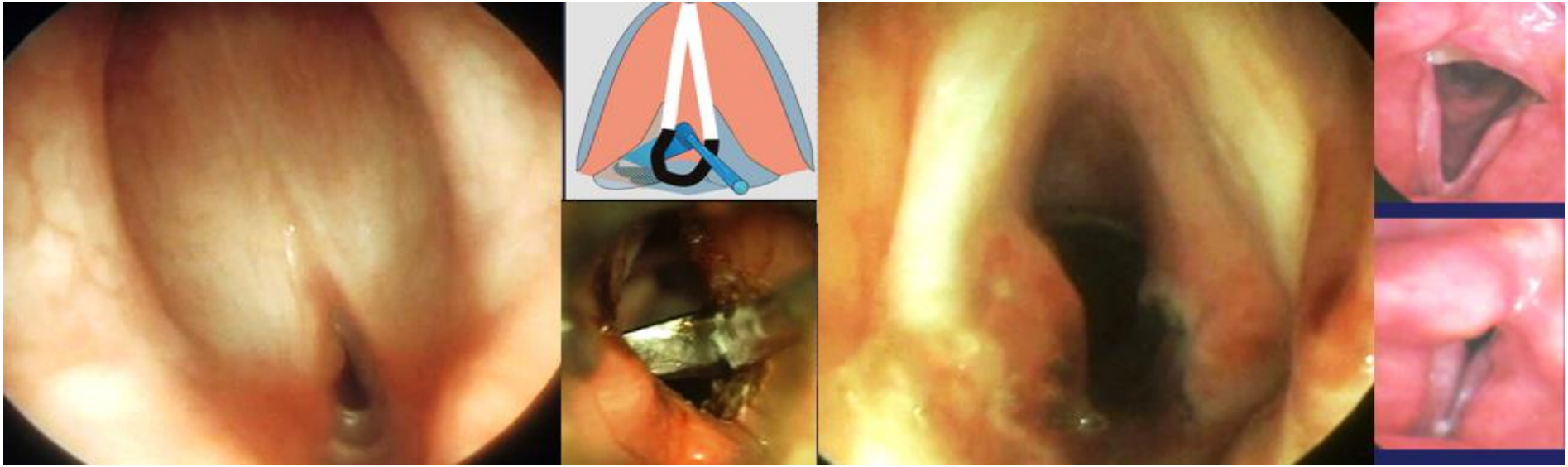


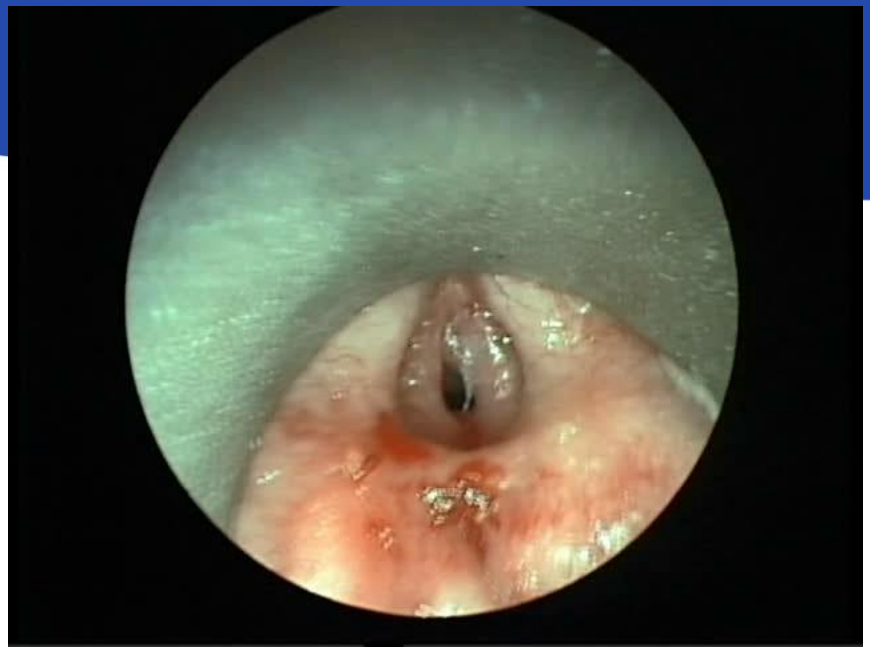
MINIMALLY INVASIVE ENDOSCOPIC SURGERY

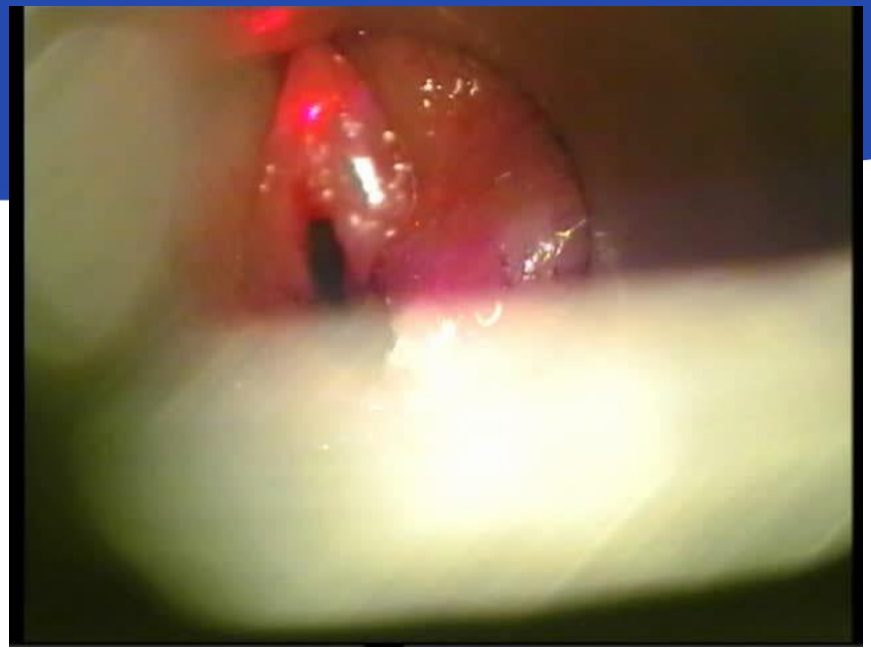


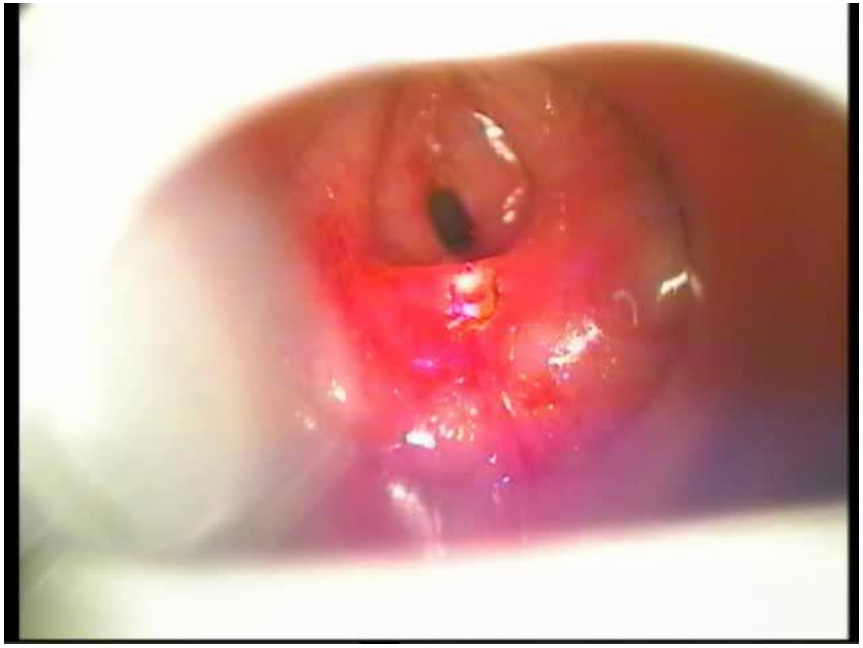

A
B
C
D
E
F

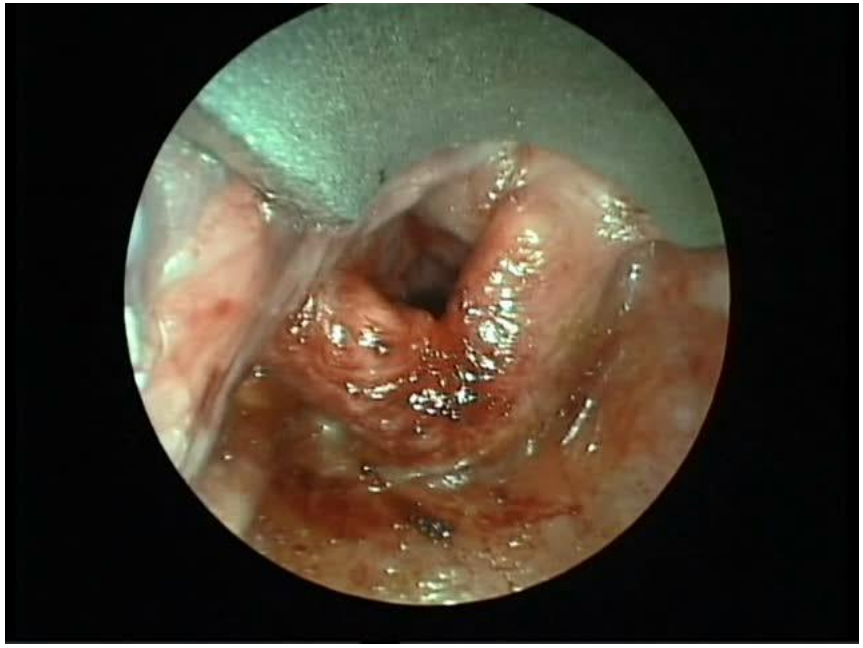
POSTERIOR GLOTTIC STENOSIS

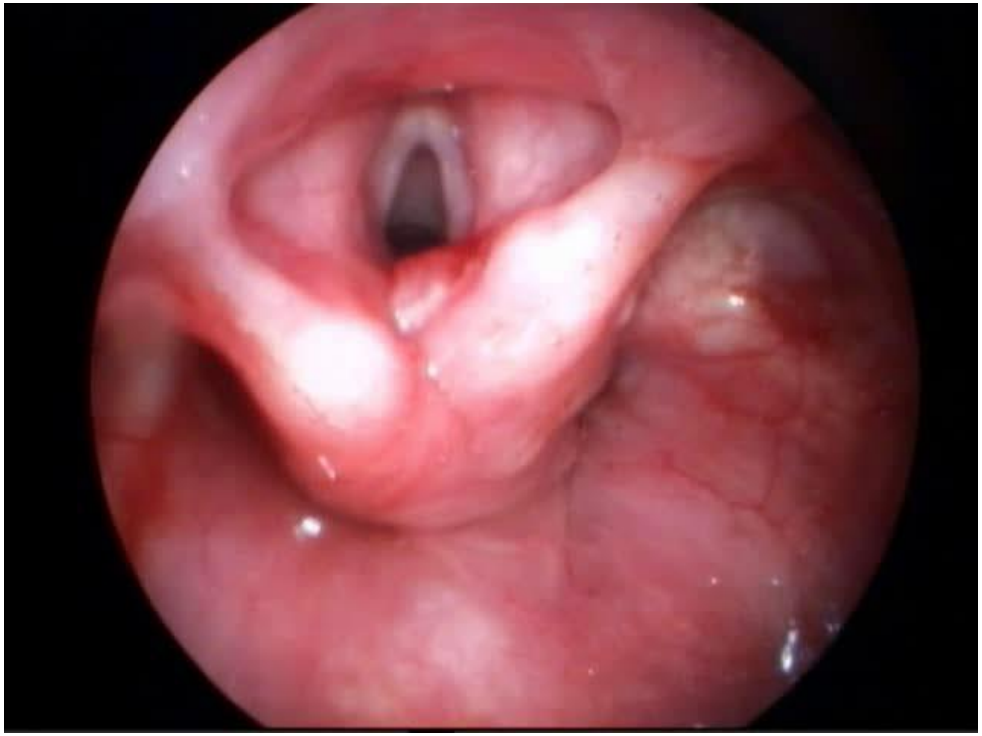




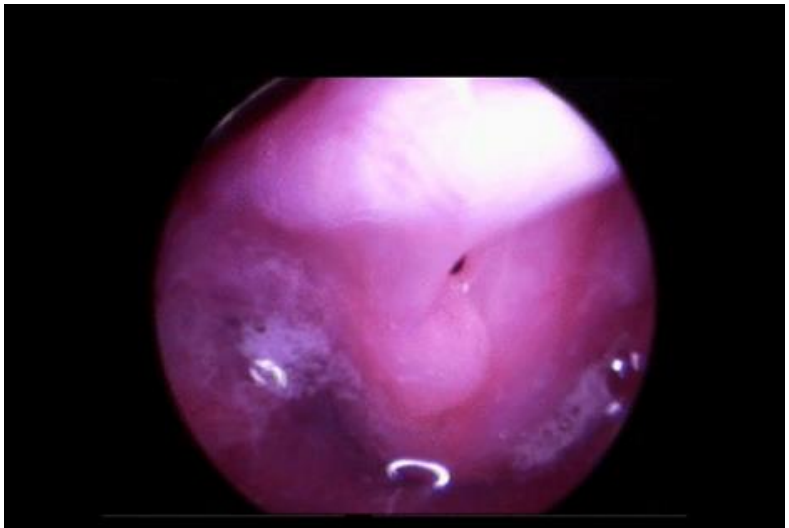


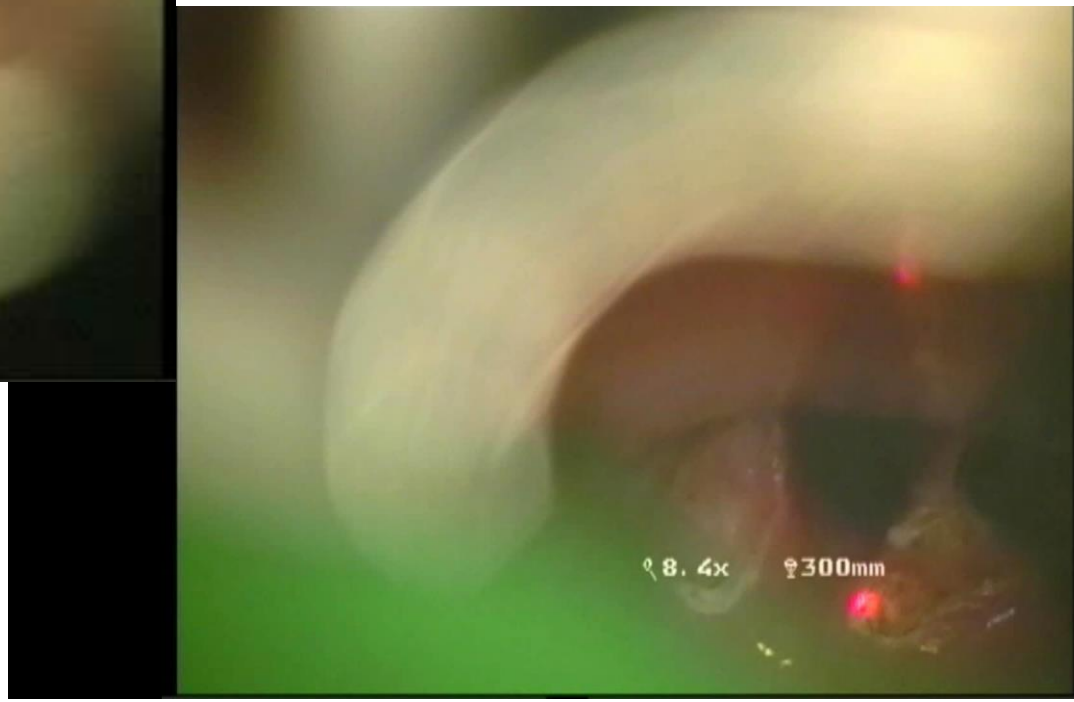






LARYNGOMALACIA



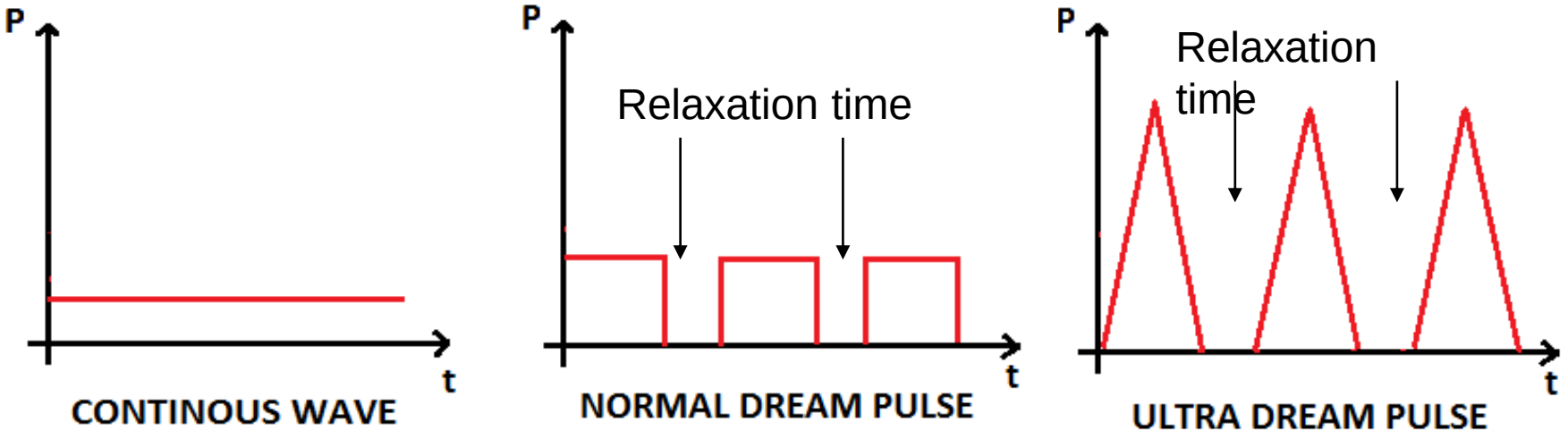


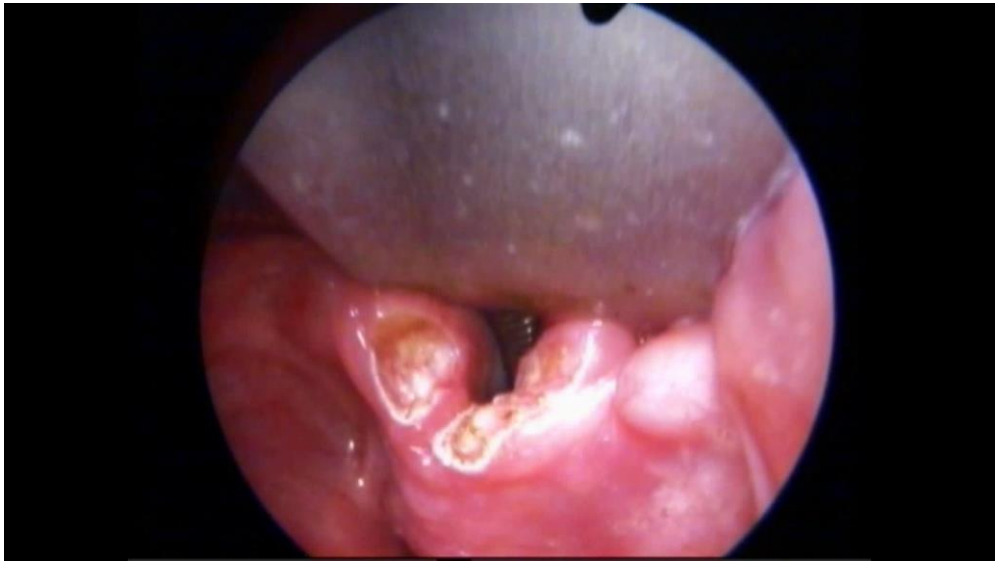
Continuous CO_2 laser vs UDP laser

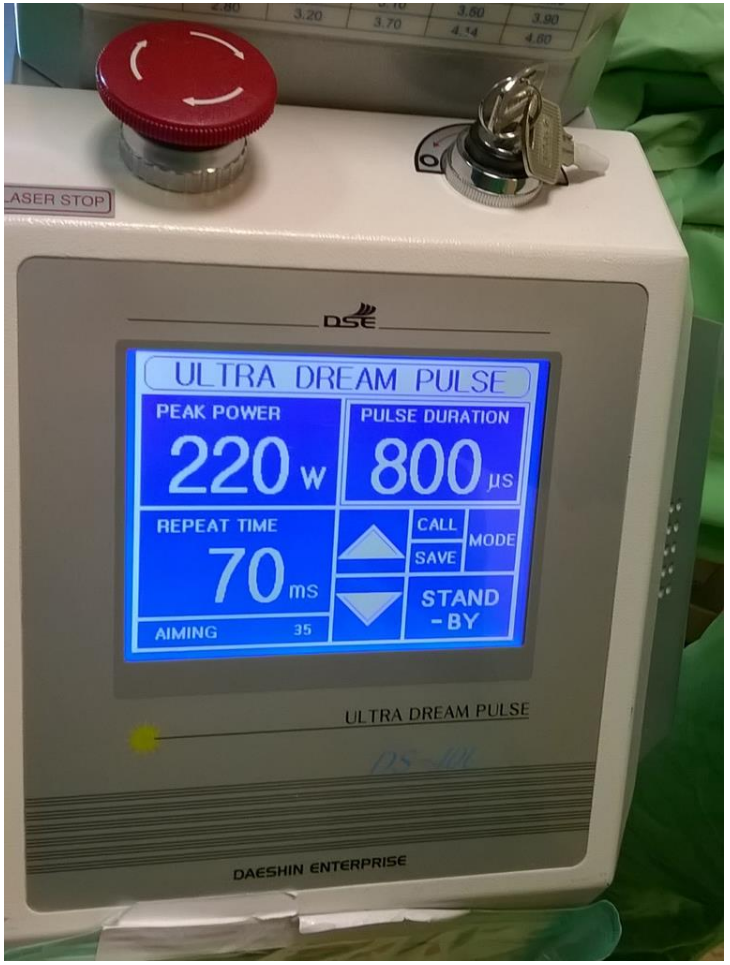
CONTINUOUS CO_2 LASER VS UDP LASER

This recently new mode accompanied with micro-spot technique has been introduced to **reduce thermal tissue damage** and **minimize the necrotic zone**. Setting of relaxation time decreases thermal spread by allowing the surrounding heated tissues to cool down.

High Peak Power and Less Tissue Damage






LASER STOP
DSE
ULTRA DREAM PULSE
PEAK POWER
220 W
PULSE DURATION
800 µs
REPEAT TIME
70 ms
CALL
SAVE
MODE
STAND
- BY
AIMING
35
ULTRA DREAM PULSE
DAESHIN ENTERPRISE

CONCLUSIONS

- Traditionally transoral surgery played only a limited, secondary role in the treatment of upper airway stenoses.
- New, effective minimally invasive methods were introduced that could preserve patients' QoL.
- Modern UDP-laser technique may extend indications (decrease postop. re-stenosis)
- Combination of endoscopic methods (Mitomycin-C, transoral stents,e.g.)