

Coblation in interventional pulmonology for central airway obstruction-An existing concept for newer horizon

G. Lokesh^{*a} (Dr), K. Shyam^b (Dr), G. Uday Kiran^a (Dr), V. Sandeep^a (Dr)
^a Manipal hospitals, Vijayawada, INDIA ; ^b Birla hospitals, Kolkata, INDIA

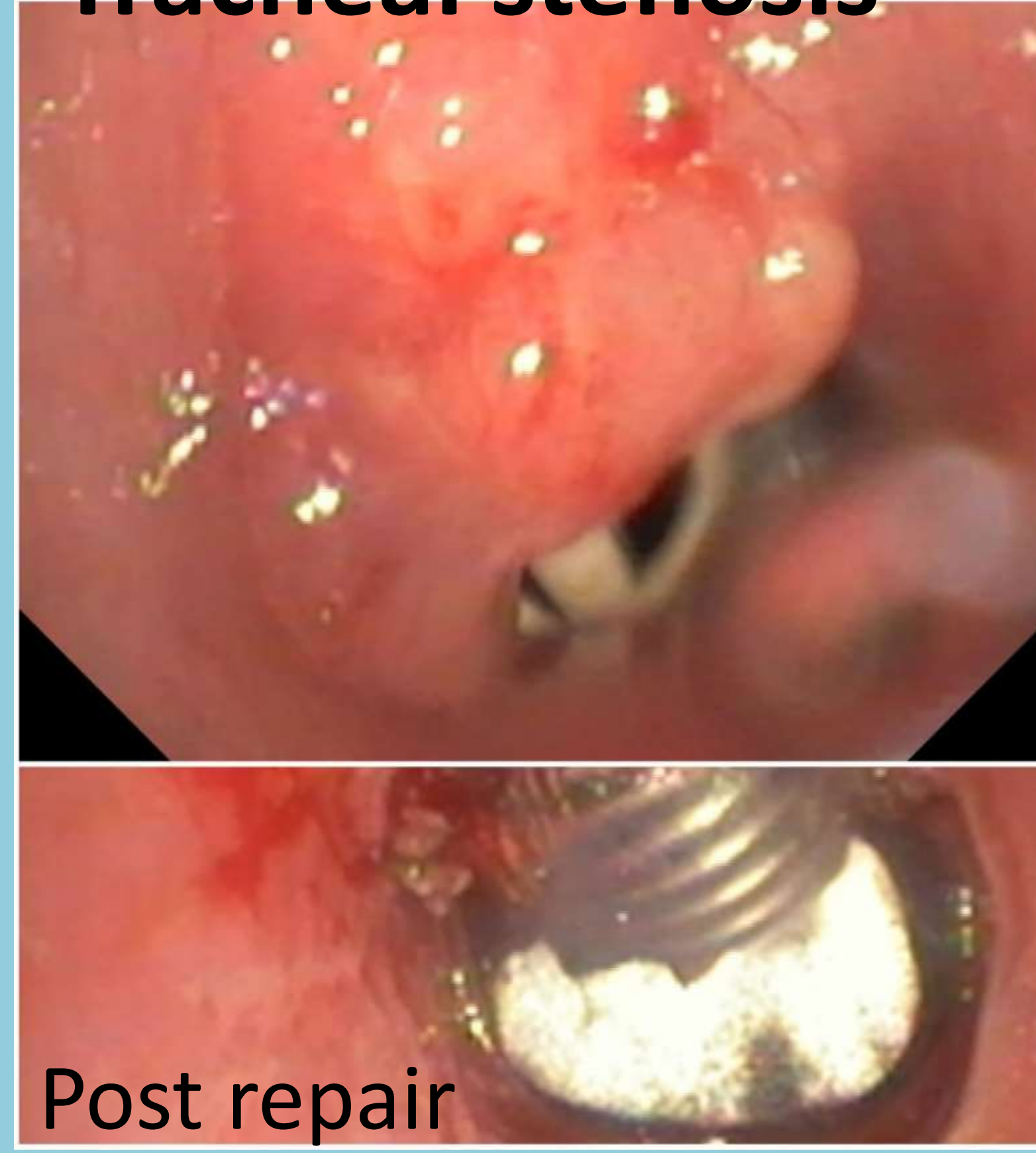
BACKGROUND

- Conventionally we use hot and cold techniques including electrosurgery and Laser and cryotherapy for recanalization of obstructed airway.
- Coblation is a radio frequency energy approximately 40 to 70 degree Celsius which allows minimal thermal damage to the tissues, unlike traditional radio frequency techniques like electrocautery which has 400 to 600 degrees Celsius

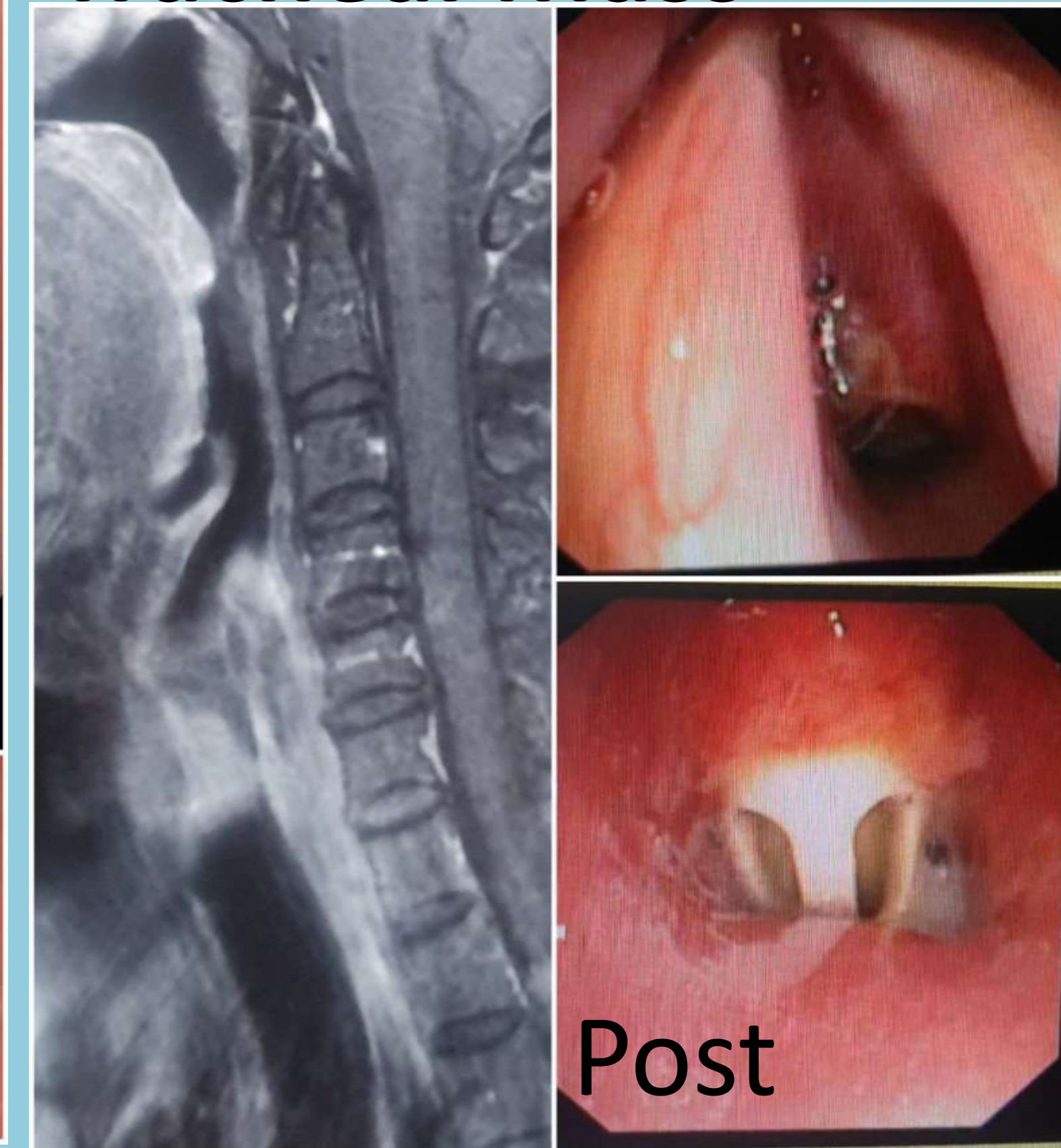
CASE SERIES

- In this article we present series of 3 cases with central airway obstruction, coblation technique was used for deobstruction in all these cases.
- First case is 54 year old female with stridor with subglottic mass found out to have metastatic papillary carcinoma of thyroid.
- Second case 23 year old male with history of head injury underwent craniotomy, on tracheostomy for 5 months on evaluation found to have tracheal stenosis above the level of tracheostomy.
- Third case is of a 70 year old gentleman with subglottic mass, biopsy was suggestive of tracheal amyloidosis.
- In all three cases airway patency was achieved with coblation, on follow up there was no recurrence or scarring

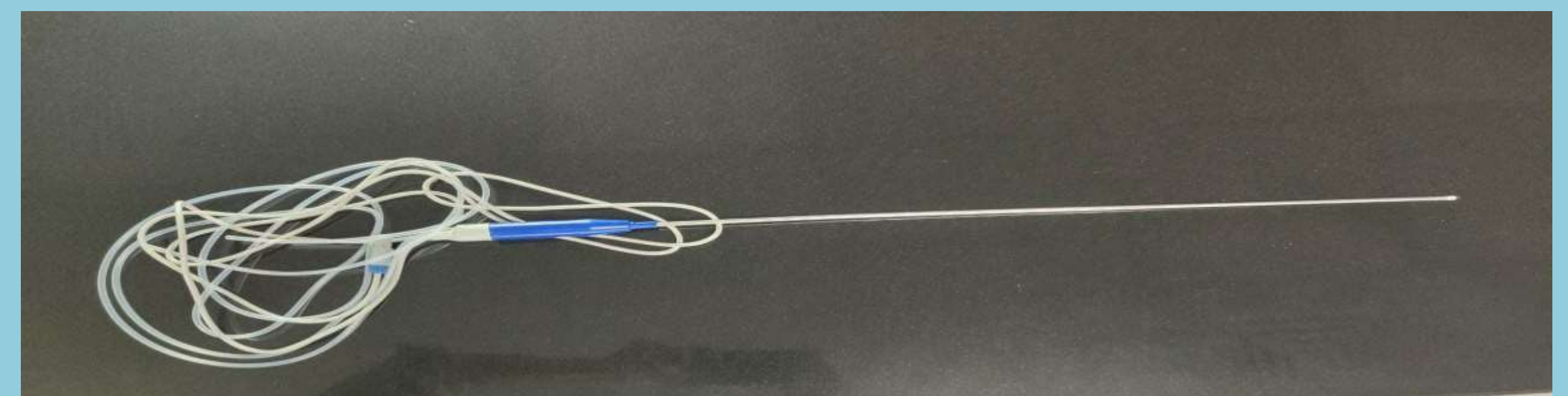
Tracheal stenosis



Tracheal Mass



Modified tracheal wand-55cm



Conclusion:

- Relatively low temperature 40 to 70 degrees Celsius and use of continuous saline irrigation minimises the risk of airway fires and decrease the risk of scarring compared to electrocautery which has higher temperatures (400 degrees to 600 degree Celsius)
- Coblation technology with modified wands of 55cm length can be a potential alternative energy in interventional pulmonology for central airway obstruction with its advantages of shorter surgery time and economically lesser cost of the equipment compared to laser technology in resource limited settings

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