



## Therapeutic efficacy of silicone stent in subglottic stenosis

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### **Objective:**

To investigate the safety and efficacy of silicone **stents** in the treatment of subglottic stenosis.

### **Method:**

Twenty-five patients with subglottic stenosis (Meyer-Cotton grade III-IV), who underwent fluoroscopically guided placement of silicone stents were recruited and studied, in terms of etiology, clinical efficacy, and related complications.

### **Results:**

Twenty-five patients received 32 silicone stents implantation. Stents removal was achieved in 8 patients who were intolerant to stents placement. The duration of stent placement was 523.5 days (range 24-748 days). After stent removal, airway caliber was increased and airway obstruction was symptomatically relieved in all patients. The effective rate was 70% while the failure rate was 5%. Stent-related complications occurred in 20 (84%) patients, including granulation tissue (n=10, 45.5%), mucus plugging (n=10, 45.5%) and stent migration (n=2, 9%) during the median follow-up time of 379 days. Greater than one-grade improvement in Hugh-Jones classification was seen in patients after stent removal.

### **Conclusion:**

Silicone stents implantation is safe and effective in treating subglottic stenosis. Whereas, the stent-related complications should be processed promptly and received follow-up with intensive observation.