Cricotracheal resection in children

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Aim of study
Paediatric laryngotracheal stenosis are congenital or acquired narrowing of the airway. The success of the treatment is significantly influenced by a correct indication for surgery, optimal timing and performance of a surgical treatment, appropriate postoperative care and rehabilitation.

Monnier, 1993

Material and method
In cooperation with the ENT and Plastic surgery Department of Katharinenhospital in Stuttgart (Germany) we participated on the treatment of three Slovak paediatric patients with laryngotracheal stenosis grade III according to Myer-Cotton classification. Patients underwent crico-tracheal resection (CTR) for benign LTS where a segmental excision of the stenotic segment was done and end-to-end anastomosis was performed.

All patients were younger than 5.5 years of age at the time of surgery. The tracheotomy was 1x resected during the surgical procedure and 2x closed after the surgical procedure. The postoperative follow-up in longer than 1.5 years shows normal growth of the larynx and trachea, normal breathing (patients are decannulated) and swallowing and a residual dysphonia.

Conclusions
CTR is the treatment of choice for severe subglottic stenosis in infants and children.

Stenosis before and after CTR

Future research:
endoscopic techniques for laryngotracheal stenosis, laryngotracheoplasty

Operating room in Katharinenhospital at Stuttgart