introduction:

Historically pediatric tracheostomies were used mainly to deal with emergencies with airway obstructions because of trauma or foreign bodies or to acute infections (epiglottitis, pharyngeal abscesses or laryngo-tracheo-bronchitis). At present, almost 60% of tracheostomies are performed in infants less than 1 year of age and usually stay in place for longer periods of time (several weeks, months or even years).

The main indications include congenital or acquired LTSs, prolonged ventilatory support and regular pulmonary toileting for persistent aspiration in cases of pharyngolaryngeal discoordination due to neurological problems (Table 1).

Methods and results:

Analysis of surgical outcome and patient’s data in 13 patients who underwent pediatric tracheostomy performed at the ENT Department of Verona University Hospitals over the last 3 years. Between January 2015 and January 2018 13 pediatric patients underwent a tracheostomy: Pediatric, intensive pediatric care Pediatric surgical and Neuropsychiatric Departments were the ones who requested the procedure. Main age was 4.3 years (2 months -12 years, range) 7 females and 6 males indications were: failure to extubate patients, prolonged mechanical ventilation subglottic stenosis.

In all cases children were intubated prior to tracheostomy. Hyperextension of the neck was obtained; horizontal cutaneous incision was always performed; blunt dissection of muscular layers and subisthmic (thyroid) tracheal incision with a horizontal cut between 2° and 3° cartilaginous tracheal ring were performed. Trachea was always sutured to skin with reabsorbable stitches. No major surgical complications were recorded. Middle term complications were peritracheostomal dermatitis resolved with topical therapy 7 cases.; 1 case of peritracheostoma granuloma. 1 patient had a cardiorespiratory arrest while in ICU due to cannula obstruction: no consequences were evident. Table 2

Discussion:

In literature and in our casistics pediatric tracheostomies are a safe procedure, with low risk and low comorbidity if performed in reference centers with skilled and experienced teams.

The duration of ET intubation before a tracheostomy is recommended varies widely and must be decided on a case-by-case basis, depending on the nature and prognosis of the primary disease, as well as the presence of comorbidities. Severe anterior neck burns, vascular anomalies of the lower neck and the need for high peak inspiratory pressures that may cause pneumomediastinum pneumothorax are all contraindications to performing a tracheotomy.

Discussion on a case to case basis is fundamental as it is a surgical procedure that reduces the incidence of complications to the minimum.