

TRACHEOSTOMIZED PACIENT – NURSING AND CASE REPORT

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ABSTRACT. Tracheostomy is an intervention that is practiced in the case where there is a need of the patient's ventilation for a period longer than 7 days. Tracheotomy is a surgical intervention by incision was made with the purpose of trachea penetration air in the shaft asthma, with the later date of trachea on the skin. It was an intervention Tracheostomy which can be achieved by conventional surgical processes, which require transporting the patient in the operating room, or by the procedure percutaneous, process which may be carried out at cog. With proper care patient undergoing tracheostomy has the right objective prevention of infections and the earliest opportunity you feel the place of incision, sucking up but not be limited, carrying out daily hygiene cannula, performing ventilation, specific methods of nutrition.

Keywords: tracheostomy, larynx, trachea, neck surgery

Theoretical considerations

A long time tracheostomy was widely criticized because it is considered that the wound resulting from tracheal incision is incurable due to existence of cartilage edges.

Tracheostomy was resumed in 1952 in Denmark, after the polio epidemic.

In order to describe the intervention we present anatomically and topographically the larynx and trachea.

Anatomical position of the larynx and trachea:

Anatomically (fig. 1), the larynx is positioned in front of the neck, between the hyoid bone and trachea. Larynx protrudes under the skin. 1, 2

Laryngeal functions:

- Respiratory and the protection of lower airways;
- Phonation, the role in articulation of language.

Laryngeal wall is made from the outside to the lumen from:

- Serous - made up of connective tissue;
- Cartilaginous skeleton consists of:
 - 3 unpaired cartilages disposed to the front:
 - thyroid cartilage,
 - cricoid cartilage
 - Epiglottis.
 - 3 paired cartilages disposed to the back:
 - aritenoide cartilages,
 - Corniculate cartilages
 - Cuneiform cartilages
- striated muscles serve to move the larynx:
 - extrinsic striated muscles - move the larynx during swallowing
 - intrinsic striated muscles - are fixed to both ends of the laryngeal cartilage.
 - tensors of vocal cords
 - constrictors of the glottis;
 - dilators of the glottis;
- Laryngeal mucosa - lining the lumen and make up four folds, two on each side. So there are:
 - False vocal strings (ventricular) - located at the top;
 - True vocal strings - located at the bottom, with a role in speech.

The lower portion of the larynx, situated between the

lower (true) vocal cords and arytenoid cartilages is called the glottis. Glottis size changes depending on the sound to be emitted. Above the glottis one can find supraglottic floor and to the bottom the glottis is continued with the tracheae.

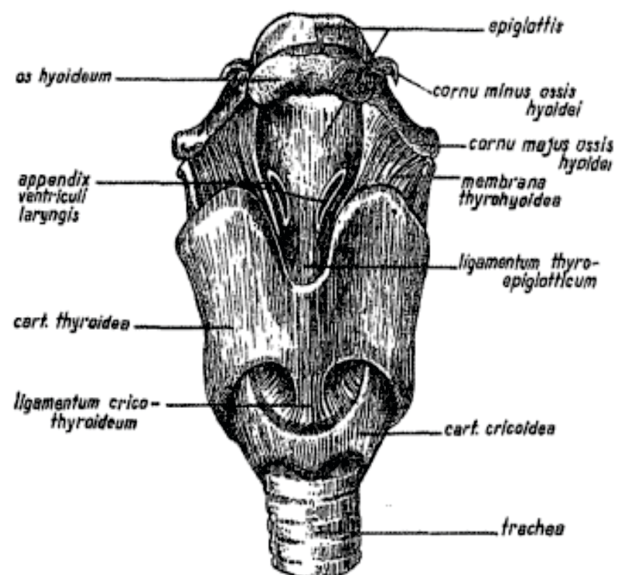


Fig. 1 Position of the larynx.
 Cartilages, membranes and ligaments of the larynx

Anatomically, the trachea is positioned in the front of esophagus to the midline of the body. Upper limit of the trachea corresponds to the lower part of the larynx at the level of the C6 cervical vertebra and the lower limit is considered to be the place where it divides into two main bronchi at the level of T4 thoracic vertebra.

The trachea is presented as a pipe-shaped fibrous cartilage nearly cylindrical, being flattened posteriorly. The length of the trachea is about 12 cm and the transverse dimension is about 2 cm.

Topographically, the trachea has two parts:

- Cervical portion - before thyroid isthmus, laterally bordered by the common carotid artery, internal jugular vein and vague nerve;

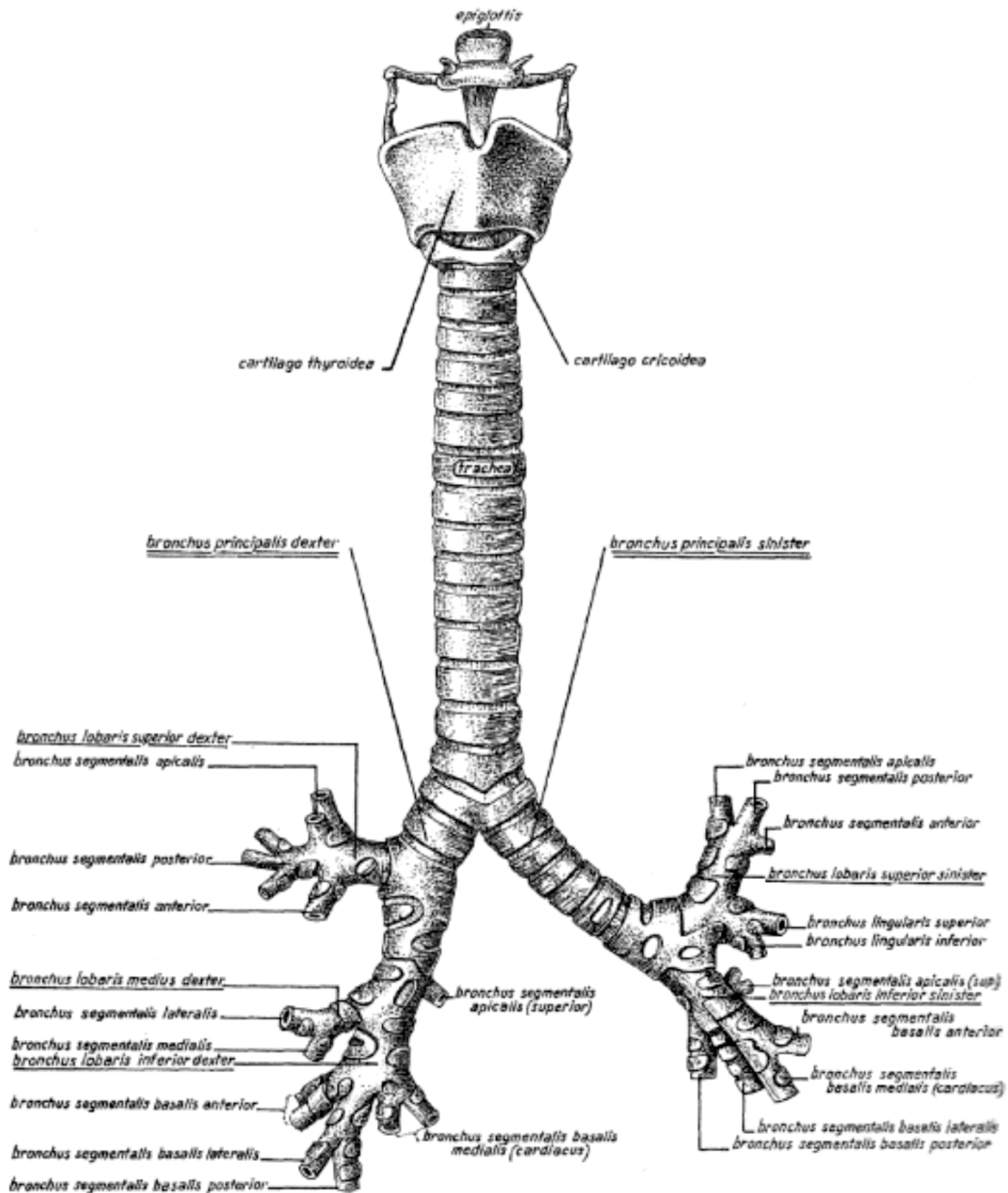
- Thoracic portion – behind the sternum and laterally bordered by the mediastinal side face of the lungs.

From structural point of view, the trachea is made from the outside inwards as follows:

- Adventitia - a tunic of conjunctive nature;
- fibro cartilaginous layer - containing 16-20 cartilaginous overlapping, incomplete rings, opening towards the esophagus. Posterior to the esophagus, the end of the rings are joined by a fibro-elastic membrane that allows the passage of alimentary bolus through the

dilated esophagus during swallowing. Musculo-elastic fibrous membrane shows a tracheal smooth muscle called the transverse muscles, whose contraction or relaxation changes the size of the tracheal orifice. The 16 to 20 cartilaginous rings are linked together by collagen and elastic fibers called the inter-ring filaments.

- The mucosa - made up of cylindrical pseudo stratified ciliated epithelium, lines the lumen of the trachea.



What is tracheostomy?

Tracheotomy is a surgical procedure which consists of the incision of the trachea, in the cervical portion, in order to ensure the patient's breathing.

Tracheostomy is a surgical incision of the trachea which allows the air to penetrate into the bronchial tree, with subsequent fixation of the trachea to the skin.

The term tracheostomy originates in Greek language: "tracheia artery" = rough artery, "stoma" = opening or hole.

Tracheostomy can be achieved by conventional surgical procedures or by percutaneous procedure. Percutaneous tracheostomy can be performed at bedside.

When the tracheostomy is performed?

Recommendations for tracheostomy refers to the cases where mechanical ventilation is required for a period exceeding seven days, avoiding the stenosis of the trachea, tracheomalacia stenosis or formation of esotracheal fistula.^{3, 4}

In what situations is indicated tracheostomy:

1. Airway obstruction by:
 - Foreign bodies;
 - Inflammatory diseases,
 - edema due to an infection, burns, trauma, anaphylactic shock;
 - glottis or supraglottic pathology that cause upper airway obstruction;
 - any other pathology that may cause upper airway obstruction.
2. If mechanical ventilation is needed for a long time:
 - Severe obstructive lung disease;
 - Severe brain disorders;
 - MODS
 - ARDS
 - Other lung disease requiring mechanical ventilation for a long period.
3. Draining lung secretions, tracheo-bronchial toilet.
4. Head and neck surgery, if necessary,
5. Uncontrolled sleep apnea
6. Prolonged coma.

In what situations tracheostomy is not performed 4:

- Children younger than 8 years;
- Patients with major problems of neck anatomy;
- Goitre ;
- High positioning of brachio-cephalic trunk;
- Tumors.

Difficulties in performing tracheostomy may occur in:

- Patients with severe thrombocytopenia,
- Bleeding Time longer than 10 minutes;
- Infection at the site of choice.

Tracheotomy Techniques, 5,9,10:

- Surgical techniques:
 1. Greggs process - with forceps dilators,
 2. Ciaglia method - with progressive dilatation.
- percutaneous tracheostomy

Surgical tracheotomy - requires bringing the patient into the operating room. Ensure all sterile field antiseptic and aseptic methods. The patient is placed supine with the cervical region in extension, position achieved by applying a roll under the shoulders.

It is considered that vertical line marks along the midline are: thyroid cartilage, cricoid cartilage and sternal fork. the tracheal rings are palpated . under the cricoid cartilage. The incision is performed 2 cm below the cricoid cartilage in the cervical region. A puncture is made in the trachea below the ring, the guiding rod is introduced for performing progressive dilation of tracheal opening in order to introduce the tracheal cannula. The ventilator is connected to the cannula and the guiding rod is withdrawn. Anesthesia is maintained through the cannula.

Since this is a very complex method and requires deep anesthesia, it's not used in emergency situations.

Incidents and accidents 4, 5,6,7,8:

- Bleeding from vasculo-nervous pack or from thyroidian istmus;
- Posterior puncture of the trachea and entry into the oesophagus.
- Tearing of the a trachea;
- False entries with the impossibility of the introduction of the cannula.i;
- Subcutaneous emphysema.

Percutaneous tracheostomy:

- could be made at bedside, not requiring the transport of the patient to the operating room;
- Bleeding is minimal;
- Low risk of infection;
- Tracheal stenosis rate lower;
- posttraheostomy faint scar.

Percutaneous tracheostomy kits (PORTEX company) includes:

- Scalpel;
- 10 cc syringe
- 14-G, needle with flexula;
- Cannulas for tracheostomy with special mandrenwithr two fixation bands ;
- Guiding string with input device.

The technique

- identification, by palpation of the thyroid and cricoid cartilage, and the first three rings of the trachea;
- The incision is preferable to be made between the first and second or second and third tracheal ring;
- The needle is introduced between the tracheal rings, until penetration into the trachea, then remove the needle and let the flexula in place;
- The guide is inserted through the flexula , and its direction is checked by video laryngoscopy, to clearly identify its direction;
- The flexula is extracted and the guide remains in place;

- The dilation device is inserted through rotation maneuvers and the orifice is expanded.

- The dilation device is extracted and a special forceps is introduced through the guide. The tracheal and the existing orifice in the soft tissues are extended with the forceps that opens in horizontally and vertically planes.

- Dilation of the orifice must fit the size of the cannula. When the required size is reached the forceps is withdrawn and the cannula is introduced through the guide. After the cannula is positioned the guide and the mandren of the cannula are withdrawn.

- The balloon of the cannula is inflated. The ventilator circuit is connected to the cannula, and the patient's ventilation is checked by auscultation. Cannula is fixed with two existing bands in the kit.

- The orotracheal intubation probe is withdrawn only when the tracheostomy cannula is positioned correctly.

Accidents and incidents

- Accidental decannulation
- The obstruction of the cannula
- Local or respiratory infections
- Hipoxia if the procedure is taking too long.
- Air penetration into the mediastin, pneumothorax, false entry, subcutaneous emphysema due to the positioning of the canula into the para-tracheal space.

- bleeding from vascular-nervous package or thyroid isthmus;

- Perforation of the trachea and entering back into the esophagus, trachea

- tearing of the posterior wall of the trachea and trachea-esophageal fistula;

- Creation of false paths unable introduction cannula;

- Stenosis of the trachea.

- Secondary bleeding due to infections or vascular erosions.

- Aparition of tracheal granulomma which can lead to the impossibility of closing the tracheostomy.

Nursing of the patient with tracheostomy

Objectives:

- Preventing infection at the incision site - by cleaning the stoma and changing the dressing every time is required. The inner cannulae will be changed daily. Reusable cannulas will be washed and cleaned, the maneuvers not exceeding 15 minutes;

- Prevention of lesions of the skin incision area;

- Vacuuming secretions will be performed:

- When breathing becomes noisy
- When mucus appears at the end of the tracheal cannula,

- When there signs of respiratory failure are present (dropping of SpO₂; tachypnea, changes in pulse and blood pressure, cyanosis, restlessness or agitation.

- The suction of the secretions will be done gently and not exceeding the length of the cannula carrying not to harm the tracheal wall.);

- It can be practiced superficial aspirations in the hole cannula, or deep aspirations, that will exceed the

length of the cannula. The aspiration of the secretions can be done with the fibroscope.

- Daily cleaning of the cannula;

- Making the ventilation;

- Specific nutritional methods.

Precautions:

- The pressure in the balloon is check by the nurse and physician for the cannulae with balloon.

- 100% oxygen will be administered for pre oxygenation and post oxygenation of patient for three minutes.

- Aspiration of secretions time will be 10 seconds. Time between successive maneuvers will be 30 seconds, the patient need to be calm and breathe normally.

- Use saline if secretions are very thick, viscous, and coughing is ineffective (max. 1ml/instillation).

- The balloon will be deflated periodically to prevent accumulation of secretions from the top of it;

- Pressure in the balloon should be checked with a manometer at 2-4 hours intervals (VN 15-20 mm Hg column).

- Humidification and heating of the respiratory gases will be done through a nebulizer or aerosol device for patient breathing spontaneously or through the humidification device of the ventilator for the patients mechanically ventilated.

Case Report

Patient B.I., 51 years old living in Arad comes to the County Hospital Arad ENT emergency room on 12.02.2012 presenting dysphagia laryngeal discomfort, marked dysphonia, pronounced dyspnea on effort.

The patient reported that the first signs of disease appeared three months ago. The onset was with pain when swallowing, first for solid foods and then liquid foods. Then the patient says that hoarseness ensued and later fatigue, initially with great efforts then with efforts increasingly smaller.

Patient is to be hospitalized for emergency respiratory failure, and the ENT doctor's diagnosis is infiltrating tumor of the hemilaringe and the patient is being prepared for surgery: tracheostomy.

From the discussion with Mr. BI we find that he is living together with his family, he is an engineer at a private company, and he is a smoker for over 20 years, drink two coffees a day and he drinks a lot of soft drinks. The patient doesn't acknowledge being allergic to any known medication and agrees with the surgery.

Preoperative Medication: Diazepam and Phenobarbital.

Half an hour before surgery: Mialgin and Atropine.

Dosage and mode of administration have been indicated by the anesthetist.

Vital functions at admission:

Pulse = 80 beats / min

BP = 130/70 mm Hg

Respiratory frequency = 15 breaths / min

Temperature = 36.8 C

G = 62 kg
laboratory findings

Values found	Reference values
<p align="center">Blood</p> ESR: 1h= 30 mm 2h =60 mm QT: 14” HT: 1’20” TGO: 26 UI/l TGP: 20 UI/l Sugar level: 95 mg/100 ml BUN: 38 mg/dL RBW: negative uric acid blood levels: 4,5 mg% Creatinine: 0,9 mg/100 ml Hemoglobin= 8,68 gr/dL Leukocytes: 4200/mm ³	<p align="center">Blood</p> ESR: 1h = 5- 10 mm 2h= 10- 20 mm QT: 12”- 16” HT: 1’30”- 2’30” TGO: 2-20 UI/l TGP: 2-16 UI/l Sugar level: 0,80-1,20 gr/100ml BUN:15-40 mg/dL RBW: negative uric acid blood levels - 2-6 mg% Creatinine= 0,5-0,9 mg/100ml Hemoglobine=14-18 g/dL (barbati) Leukocytes: 4000 =10000/mm ³
<p align="center">Examination of urine:</p> Density: 1018 pH: 6,9 Proteins: negative Glucose: negative Ketones: negative Nitrite: negative Urobilinogen: negative Bile pigments: negative Sediment: Leukocytes: 5/μL Bacteria: 0/HPF Superficial epithelial cells: 11/ μL	<p align="center">Examination of urine:</p> Density: 1016-1022 pH: 4,8-7,4 Proteins: negative Glucose: negative Ketones: negative Nitrite: negative Urobilinogen: negative Bile pigments: negative Sediment: Leukocytes: <= 28/μL Bacteria: 0/HPF (HPF high power field – 400x) Superficial epithelial cells: <= 28/ μL

Biopsy exam on 14/02/2012.

On 21.02.2012 the result is: Fragment of a laryngeal tumor. Spinocellular cell carcinoma.

The patient care plan is drawn up under the 14 basic needs of the concept of Virginia Henderson.

Dependency manifestations of the patient derive from lack of strength, will and knowledge of the difficulty of his own situation.

The levels of care for the patient with tracheostomy are:

- Primary - maintaining and promoting health.
- Secondary - seeks curative interventions and its purpose is to find the ensuing problems in a timely

fashion.

• Tertiary - seeks recovery – the role of the assistance is to provide individual care until gaining personal independence.

The difficulty is in the addiction causes and represents an important obstacle to achieve satisfying the basic needs.

Sources of difficulty include:

- physical, psychological, social, spiritual factors ;
- Factors linked to insufficient knowledge of the disease.

Plan for tracheostomized patient care is presented in Table 1.

Table 1

Tracheostomized patient care plan

BASIC NEED	DIAGNOSTIC NURSING	OBJECTIVES	INTERVENTIONS	EVALUATION
I. Normal Breathing and circulation	Difficulty in breathing due to glottis obstruction. Expression: whistling noise on inspiration and expiration due to creation of a false way for breathing.	02/12/2012 at 2:10 p.m. The patient will have an effective breathing within two days through a tracheal cannula	I will install the patient in the ward and will provide an optimal environment (room temperature 22 C and humidity by applying wet towels on the radiator). Ventilation of the room whenever is needed. Suction of the bronchial secretions, whenever needed. I will instruct the patient when talking to put a finger on the orifice of the cannula whenever talking. Because the tracheal cannula may fill with mucus shortly, preventing breathing, I will remove the removable cannula piece and I will wash with hot water in abundance and I will carefully inserted the piece back , with the curvature down. This removable piece is backed with a removable ribbon that is tied around the neck. I clean the wound around the cannula by wiping with antiseptic solution and I will protect with a protective ointment. I will ask the patient to quit smoking and avoid dust and cigarette smoke. I'll indicate to the patient the upright torso position to increase thoracic expansion. I supervise the quality of respiration: amplitude, rhythm, frequency. I will monitor pulse rate. I appreciate the behavior of the patient to adapt to loss of self image.	02/14/2012 The patient has a tracheal cannula effective breathing.
II. Feeding and hydration	Refusal to feed and hydrate because of solitude manifested by isolation from other patients and caused by the sadness due to the diagnosis.	12.02.2012 The patient will accept the imposed eating within two hours.	I will identify with the patient the factors that cause isolation and I will help the interventions in a climate of relationship and support. I allow the patient to express feelings of isolation when he feels the need. At the doctor indication I will feed and hydrate the patient, within 24 hours after surgery, with parenteral infusions of glucose 5%, 500 ml + serum; . Ringer solutions + 500 ml 10% glucose, 1000ml + salts of sodium and potassium. Gradually I'll let the patient decide to eat, not suggesting that. I will leave within the patient reach high-caloric content liquids; I will appreciate the patient diet and follow the progress made. Inform the patient that very cold or hot drinks, and smoking should be avoided.	12.00 14.02.2012 The patient establish significant verbal and nonverbal ties with others,
III. To eliminate	Viscous sputum adhered to the cannula, because smoking and infectious process.	02/13/2012 Reducing viscous secretions within one week.	I will administer the treatment indicated by the physician: Bromhexin tid, Penicillin 4x1000000day, Diazepam 1 evening tb. I will give to the patient a recipientin which he will urinate and every 24 hours I will evaluate the diuresis and perform water balance measurements. I will explain the importance of maintaining fluid and electrolyte balance in the body. I will aspirate accumulated secretions in the tracheal cannula, as needed. Every 3 to 4 days I will replace the cannula.	13.02.2009 The amount of secretion was reduced significantly in the last week.
IV. To move and to maintain a good posture	Difficult to mobilize because of pain created by the surgical technique, and due to the presence of the cannula in the trachea.	02/13/2012 patient actively moves without difficulty within two days and will take walks with loved ones.	I will determine the intensity and duration of pain, factors that increase and diminishes the pain . Give as needed the prescribed analgesic. I explain to the patient the importance of making moves, walks and exercises. I will inform about the disease. I will encourage the patient from the first active mobilization.	02/14/2012 The patient listens to the advice of professionals, take walks with other hospitalized patients.
V. To sleep and to rest	Difficulty to rest and sleep because of the anxiety manifested by fatigue and fear of death by suffocation.	02/13/2012 patient will rest and will be pain free within 25-30 minutes after taking the .	I will ensure a climate of calm and safety for the patient. I find the anxiety level and I will plan appropriate interventions. I explore the causes and triggers of anxiety. Administer the painkiller: Algocalmin as required by the physician; Diazepam in the evening. I will have within reach the vacuum aspirator and oxygen cylinder.	02/13/2012 The patient has a soothing sleep.
VI. To get dressed and to undress	Disinterest towards the outfit due to the pain	02/13/2012 The patient will be interested to the dress code, changing it every time he sweats, within two days.	I provide optimum temperature in the room and I forbid the opening of the door and windows as long as the patient change his clothes. On the first day help patients to change their underwear because he sweats due to fever. I recommend the patient to seek help if he have dizziness. I appreciate the progress made for each patient.	02/13/2012 The patient is convinced that he must have a proper attire, performing action to dress and undress himself.
VII. To be clean, cared, and to protect the skin.	Disinterest in hygiene measures because of self-image disturbance.	Time 02/13/2012 11:20 hours He will participate in his hygiene. He presents a clean oral cavity and skin within two to three days.	I will plan the patient care and personal hygiene and I will help him to meet the standards. I will allow autonomy in meeting hygiene care when needed. I will suck the tracheal secretions from the cannula with a vacuum device. I will protect the wound around the cannula with protective ointment containing the vitamin A and E. I wash well with soap and water in abundance the removable piece. I will clean around the cannula, dressing whenever is saturated with secretions and teach the patient how to do so. I will inform the patient that he's not allowed to drink sprinkled, too cold or too hot drinks. I will explain that alcohol, smoking and too much coffee are the main factors influencing the altered mouth mucosa.	02/13/2012 The patient has the mouth and skin clean.
VIII. To maintain the normal body temperature	Hyperthermia due to an inflammatory process, manifested by increasing axial temperature values to 38.6 0C	12.02.2012 at 20:00 hours Keeping the heat curve values within 36.5 0-37 0 C, while in hospital.	I tell the doctor the patients temperature and at his indication I will give a slow intravenous administration of Algocalmin 1 f, 1 million IU of penicillin, 4x1 fl / day, I make the dressing, aspirating the accumulated secretions at the tracheal cannula. I will ensure room temperature between 18-20 C. I check the patient's temperature hourly until the temperature drops to 37 C. I will ventilate the room 4 times a day, every 15 minutes and last time 30 minutes before bedtime.	02/14/2012 The patient shows no signs of fever or chills.

BASIC NEED	DIAGNOSTIC NURSING	OBJECTIVES	INTERVENTIONS	EVALUATION
IX. To avoid dangers	<ul style="list-style-type: none"> • Acute pain, after surgery • Disruption of self-image because of the difficulty to adapt to changes in body plan by the apparition of the stoma in the trachea. 	2:10 p.m. 12.02. patient to express pain reduction within 2 days The patient gets used to the idea that only through the stoma and the introduction cannula his life could be saved	Assess pain characteristics: location, intensity, duration. Evaluate the status of the patient: sensitivity, perception, thinking, emotion. I will explain the need for absolute diet. I evaluate the factors that increase or decrease pain and I will remove it. I will give to the doctor's order the anti-inflammatory and analgesics. I encourage the person to express the pain perception. I will look carefully to the patient as a whole, not only taking interest in his pain. I will provide a suitable climate: quiet, dim light. I identify with the patient the means to minimize the influence of injury on his social life. I help patients to identify and express their fear of isolation and rejection of others. I will lead progressively the patient to participate in his personal care, and the care of the stoma, and the bandage around the cannula I advise the patient to report pain from the beginning because the delay makes it difficult to reduce the pain.	14.02.2012 at 09:00 pain and the patient gave express their wishes whenever needed. The patient is convinced that only thus he can live and will do everything to move forward.
X. To communicate	Ineffective communication due to changing the means of phonation and expressing the sounds. Ineffective communication at emotional level due to lack of knowledge of effective methods, manifested by difficulty to maintain and establish meaningful connections due to alteration and change of image	02/12/2012 The patient will form and express sounds by closing the orifice with his finger within two days. Establish links with significant others, within two days.	I will explain how the patient can communicate with the cannula. I will encourage the patient to communicate as often as he can to accommodate with the technique. I will explain attitudes that facilitate effective communication: active listening, attention, respect, honesty. I will help the patient to use means of reducing anxiety by recreational activities: music, reading. I'll explore with the family members the methods to render harmony around the sick person. I assess anxiety and I will ask tutors to support the patient in adapting to this new situation. I will place the interventions in a climate of relationship and help.	02/14/2012 12:00 connect the patient significantly with others, verbal and nonverbal.
XI. To act according to beliefs and values	Guilt because of body plan change, manifested by irritability.	02/12/2012 patient expresses feelings of guilt reduction within 9 days.	I explain that the patient that is natural to evade the difficulty to perform a role. I use active listening to help patients find solutions to assume conflicting roles. Trying to identify a person to be the patient's role model. I suggest to the family the importance of this person. I will inquire about the religious services program taking place in the hospital, confessions, hours of prayer.	02/12/2012 The patient has diminished feeling of guilt, goes to the religious services that are held either in the dining room or within the hospital.
XII. Need to be busy and useful	Devaluation and inability to perform things that he was making before the intervention	02/12/2012 reduce the patient's expression of worthlessness	I explain to the patient that is necessary to break away from everyday problems within the recovery period. I direct the patient to activities that can distract from problems, such as reading.	02/12/2012 The patient has occupations that can meet by himself.
FUNDAMENTAL NEED	DIAGNOSTIC NURSING	OBJECTIVES	INTERVENTIONS	EVALUATION
XIII. To relax	Difficult to perform recreational activities because of the required rest .	02/14/2012 The patient will perform recreational activities during the week.	Evaluate with the patient what he likes to do in his spare time. Plan together with the patient an active exercise schedule or simple activities that do not require too much concentration. Daily allocation of time to discuss with the patient. During activities I will make sure that that the limits of the patient are not exceeded. I appreciate the patient after any recreational activity carried out.	17.02.2012 During hospitalization the patient performs recreation.
XIV. To learn how to keep healthy	Difficult to fulfill the instructions to recover health	02/12/2012 patient expresses interest to recover and maintain his health	I'll take an approach to remove ignorance. I will explain the patient's medical issues and what to do in order to improve the condition.	02/12/2012 The patient understands and cooperates with the medical team to improve his health.

CONCLUSIONS

1.Tracheostomy is a mutilating surgery that immobilizes the patient for a certain period, and limits body functions and changes its normal behaviour.

2.The care plan for patient with tracheostomy is designed considering the 14 basic needs described by Virginia Henderson.

3.A fundamental need is a vital necessity, essential to human beings to ensure their well being, the physical and mental status..3

4.For reaching the minimum physiological and psychological balance, the patient must be able to meet its needs at a basic level.

5.Addiction is an inability of a person to behave or perform alone, without help, actions that would enable to meet his basic needs.

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