

ABSTRACT

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Early Records of Tracheotomy. DOUGLAS GUTHRIE. (*Bulletin of the History of Medicine*, January, 1944, xv, no. 1.)

The operation of tracheotomy, or as it was originally termed, bronchotomy, was known to surgeons of ancient and medieval times, but, being regarded as a dangerous operation, was seldom performed. Those who were bold enough to attempt it used a transverse incision, hesitating to divide cartilage, and a straight tube was introduced. This method was favoured by Harvey's teacher of anatomy, Fabricius, though there is no record of his having practised it upon a living patient. Although priority cannot be definitely assigned, one of the first records is that of Nicolas Habricot of Paris who, in his treatise of Surgery, published in 1620, describes a successful tracheotomy for a gunshot wound of the larynx. He writes: "A girl of about 25, stooping to open a door for her master, who was pursued by assassins, received a wound from a ball, which struck the larynx, especially the thyroid cartilage; the ball passed across to the other side, lodging under the skin. So much swelling supervened that the patient would have suffocated, but for a leaden tube introduced into the trachea, through which she might breathe."

Almost a hundred years later, Purmann, writing from Breslau in a quaint volume entitled *Chirurgia Curiosa* (1706), describes bronchotomy and records a single case. "In this manner," he relates, "I opened the *Aspera Arteria* in Mr. Christian Pfennig Mauwen, a linen draper at Münden, in 1672. He was 39 years of age, had a violent Swelling in his Throat and was sometimes ready to be choaked. The Operation being as happily performed as could be desired, the Patient was perfectly recovered from Death to Life." A few years later another Breslau surgeon, Lorenz Heister, described the operation in his textbook (1718). He recommended the adoption of the word "tracheotomy", and he appears to have been the first to employ a vertical incision. "By these means," he tells us, "I happily extracted a Piece of boiled Mushroom, which slipped into the Trachea of a jocose Man at Helmstadt, with Danger of Suffocation, by Laughing while he was eating Broth, in which Mushrooms were boiled."

The first surgeon to perform tracheotomy in Britain was George Martine who, after studying at Leyden, practised for some years in his native town of St. Andrews. The operation is recorded in *Philosophical Transactions*, no. 416, December, 1730, in the following words: "I was called to a young lad who was all of a sudden taken ill with a violent trouble in his throat in which however I could see nothing wrong. He had great Pain and a Dyspnoea, with an Impossibility of swallowing. I reckoned it an Angina of one of the worst kinds, and the seat of the disease in the larynx and top of the gullet. Notwithstanding repeated Bloodings, Blistering, Cupping, etc., the Disease continued so obstinate and the patient so like to suffocate that next day in the afternoon, his Friends, although very averse

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in the morning, when I first proposed the piercing of the Wind pipe, at length earnestly desired that the Operation might be performed; and the poor Lad bade us try any Experiment to preserve his Life. In a few hours he would have strangled to death most miserably. Whence you see it was not out of an itching Desire of making Experiments, or a wanton Officiousness, that we directly set about the Operation. Which was done with such success, that in less than four Days, his Breathing being perfectly easy, we removed the Cannula and left the Glottis to do its own Office. The cannula should not be made near so short as is ordinarily proposed. The Parts may be so much tumified that it will require a Pipe above an Inch long to penetrate sufficiently into the Aspera Arteria. There would be less Hazard of a stoppage if the Cannula were shorter and wider. I cannot but think it an ingenious Proposal of one of our Ministers here to make the Pipe double, or one within another; that the Innermost might be safely and easily taken out and cleaned, without any Molestation to the Patient."

Shortly after the publication of Martine's case there occurred a curious episode in the history of tracheotomy. In 1733, a London surgeon, named Chovell persuaded a condemned man, a highwayman, named Gordon, to allow him, for a substantial fee, to perform tracheotomy upon him the night before his execution. This surgeon had tried the experiment on several dogs and always with success, but his human subject, although still alive when cut down by his friends after the hanging, succumbed very soon.

The chief indication for the operation of tracheotomy in the early days appears to have been acute inflammation of the pharynx or larynx, probably causing laryngeal oedema. In the various records it is designated squinance, squinantia, cynanche, synanche, angina, or quinsy (quinsy).

E. W. Goodall, in the *British Journal of Children's Diseases*, xxxi, 367, 1934, could trace only 28 cases of tracheotomy before the days of Brettoneau (1771-1862) who, with his successor Trousseau (1801-1867), did so much to popularize its employment in diphtheria.

D.G.