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MEANS FOR HOLDING NASAL TUBES IN POSITION

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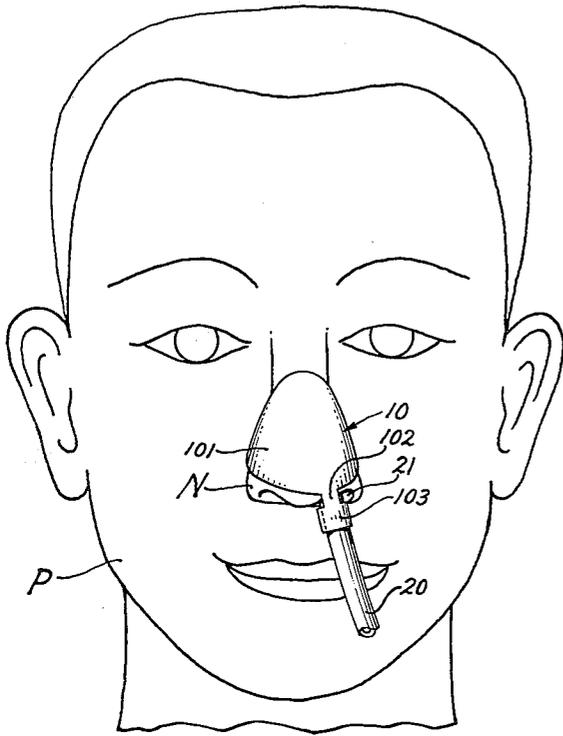


FIG. 1

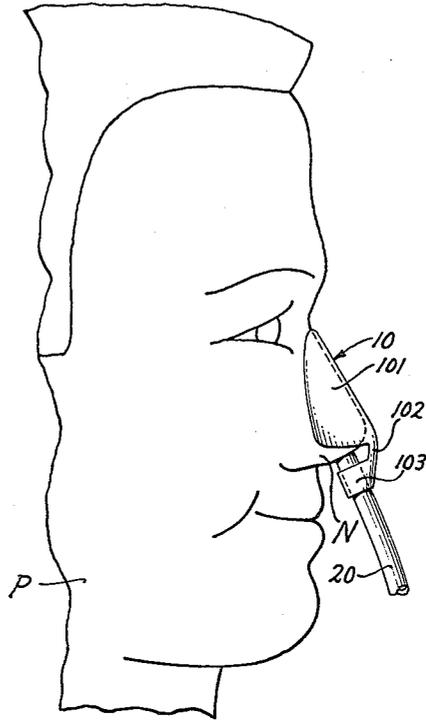


FIG. 2

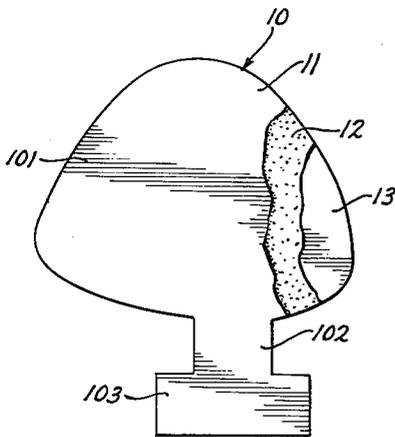


FIG. 3

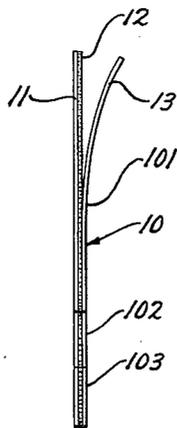


FIG. 4

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**MEANS FOR HOLDING NASAL TUBES
 IN POSITION**

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Whenever patients are subjected to nasal intubation for either stomach suction or for long time feeding, the problem exists of maintaining the tube in a relatively fixed position to relieve the patient from normal and oftentimes acute discomfort.

The conventional method employed to fix a nasal tube after intubation is to employ adhesive tape wrapped around the tube just below the nose and adhered to the nose, cheek or forehead. The conventional practice is far from ideal inasmuch as the adhesive tape quickly loses its effectiveness by stretching or becoming loosened by perspiration, thereby allowing the tube to move in and out of the nostril as the patient swallows and to irritate the nasal cartilage. In other words, excess motion of the nasal tube after intubation causes a pressure against the alar rim of the nose and creates an unpleasant irritation or cellulitis which eventually leads to ulceration if the condition is not corrected. Correction of such a condition is generally sought to be accomplished by re-intubation using the opposite nostril. This corrective measure is very annoying to timid, nervous or extremely sick patients, and more frequently than not, is impossible to employ because of the fact that a large percentage of people have a bent septum or otherwise dislocated and sometimes enlarged nasal system.

With the foregoing in view, the primary object of the instant invention is to provide an improved yet simple and effective method and means for holding nasal tubes in position after intubation which materially reduces possibility of nasal irritation caused by excessive movement of the nasal tube and which provides greater comfort for the patient during periods of prolonged nasal intubation.

Other objects of the invention will become apparent by reference to the following detailed description taken in connection with the accompanying drawings, in which:

FIG. 1 is a front view of a patient who has been intubated through his left nostril showing in use a means embodying the invention for holding the nasal tube in position.

FIG. 2 is a side elevational view of the patient and nasal tube holding means disclosed in FIG. 1 taken from the right side of the patient.

FIG. 3 is a front elevational view of a nasal tube holding means embodying the invention for use when a patient is intubated through the left nostril.

FIG. 4 is a side elevational view of the nasal tube holding means shown in FIG. 3 taken on the line 4-4 thereof, and with a portion of the protective coating thereof exfoliated.

Referring now to the drawing wherein like reference numerals refer to like and corresponding parts throughout the several views, an illustrative embodiment of a nasal tube holder 10 embodying the invention for use in left nostril intubation is shown on a patient in FIGS. 1 and 2, and disclosed in detail in FIGS. 3 and 4. Obviously, for right nostril intubation, the nasal tube holder would be like and similar—but opposite hand.

The nasal tube holder 10 is preferably formed of a

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tough relatively thin ductile moldable aluminum sheet 11 of essential strength for the purpose of a type and thickness that can be readily molded to the nose by digital pressure. The rear or underside of the said moldable sheet 11 is provided with a suitable layer of non-hardening and non-irritating to the skin adhesive 12 which is covered for sanitary, storage and handling purposes by a layer of plastic coated paper or other plastic protective sheet 13 which adheres only slightly to the adhesive 12, and which may be stripped from the assembly without removing or carrying with it any appreciable amount of adhesive 12 from the rear of the moldable aluminum sheet 11 because of its relatively little affinity to the said adhesive 12.

In shape, the nasal tube holder 10 consists of a nose piece 101, a stem portion 102 depending from the nose piece 101, and a tab 103 extending below and laterally preferably both sides of the said stem portion 102.

In using the invention, the nose N of the patient P is intubated with the usual smooth plastic nasal tube 20 which, in the illustration in FIGS. 1 and 2, extends from the patient's left nostril 21. The plastic protective sheet 13 is stripped from the nasal tube holder 10 thereby making the adhesive coated aluminum sheet element 11 ready for application of the nose piece 101 thereof to the patient's nose N, and the tab portion 102 to the nasal tube 20.

It is preferable that the nose piece 101 be molded to the patient's nose N by digital manipulation, after which the tab 103 is wrapped around the nasal tube 20, all as best shown in FIGS. 1 and 2. In wrapping the tab 103 around the nasal tube 20, it is desirable that the said nasal tube 20 first be positioned at the most comfortable angle possible with respect to the patient's nostril 21. This is generally accomplished by assuring that the nasal tube 20 is disposed at an angle aligned with the patient's nostril 21 after the nose piece 101 is digitally molded to the patient's nose N but before the tab portion 102 is applied to and wrapped around the nasal tube 20.

The improved means for holding nasal tubes in position disclosed herein has proven to provide great comfort to patients necessarily subjected to nasal intubation over substantial periods of time, sometimes extending from three or four days to weeks, and in some instances, for months.

Although but a single embodiment of the invention has been disclosed and described in detail, it is obvious that many changes may be made in the size, shape, arrangement and detail of the various elements thereof, all without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. Means for holding a nasal tube in proper position after intubation through a patient's nostril comprising a moldable sheet of ductile material having essential strength for the purpose including a nose piece, an integral stem portion depending from said nose piece sufficiently off-center thereof for positioning opposite the intubated nostril when said nose piece is applied to the patient's nose, and a tab formed at the lower part of said stem portion extending laterally therefrom, a non-hardening and non-irritating to the skin adhesive on the underside of said moldable sheet, and a stripable protective sheet over said adhesive which may be stripped therefrom prior to placing and digitally molding the said nose piece on a patient's nose with the said stem and tab depending

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therefrom in alignment with the intubated nostril, the said tab being fixable by the adhesive thereon to that portion of the nasal tube depending from and adjacent to the patient's nose.

2. Means for holding a nasal tube in proper position after intubation through a patient's nostril comprising a moldable sheet of ductile metal foil material having essential strength for the purpose including an integrally formed nose piece, a stem portion depending therefrom and eccentric with respect to the center thereof sufficient to align readily with the intubated nostril, said stem portion being formed to admit of at least the lower part thereof to be wrapped around said nasal tube adjacent said intubated nostril, a non-hardening and non-irritating to

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the skin adhesive on the underside of said moldable sheet, and a stripable protective sheet over said adhesive which is stripped therefrom prior to placing and digitally molding the said nose piece in removable adhesive relationship on a patient's nose and securing the said stem portion by the adhesive thereof to that portion of the nasal tube depending from and adjacent to the patient's nose.

References Cited in the file of this patent

UNITED STATES PATENTS

2,159,947	Ganzel -----	May 23, 1939
2,590,006	Gordon -----	Mar. 18, 1952
2,596,947	Turkel -----	May 13, 1952