An Original Method for Endotracheal Intubation of Rabbits

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Summary. An original technique for endotracheal intubation of rabbits is introduced. It is described as a rapid, reliable, and anatomically atraumatic method significantly superior to those currently in use.

Key words: Endotracheal intubation – Rabbits

Introduction

Easy to breed and handle, rabbits are widely used for various surgical experiments. In such experiments, inhalation anesthesia, especially under intubation, has been preferred to i.v. and i.m. methods to control the state of anesthesia. In long-term studies, intubation must be carried out as smoothly as possible to permit its being repeated every few weeks or months. Difficulty in the intubation of rabbits is notorious because of their small glottis and the soft and flexible tissue surrounding it [1–5].

Material and Methods

Our efforts have resulted in a new and simple method enabling intubation without utilization of the laryngoscope.

Induction

The rabbits should be handled quietly to avoid exciting them. To inhibit salivation, bronchom-secretion, etc., it is advisable to apply atropine (0.08 mg/kg body weight) i.v. from the anterior auricular vein with a 23–27 G needle. Pentobarbital sodium (30–40 mg/kg) is slowly injected i.v. A dosage slightly less than that normally used may be sufficient.

Intubation

After induction, the hairs on that part of the neck exposed to view when the rabbit is in a supine position are cut short to facilitate external palpation of the thyroid cartilage and trachea during intubation.

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The rabbit is then placed on a supine holder, the four legs are bound in place, and the maxilla is fixed in place with a ring-type holder which can force the head backward and place the neck in a condition of hyperextension (Fig. 1a).

With the index finger of the left hand in light contact with the cranial thyroid incisure, the cricoid cartilage and trachea are held between the thumb and middle finger (Fig. 1b).

The tube (ca. 12 cm long; internal diameter: 3–3.5 mm), with about 2–3 cm of the stylette protruding from it, is inserted into the mouth with the right hand. It is slowly advanced into the esophagus to a point 4–5 cm beyond the thyroid cartilage. With the stylette tip at an upward angle, the tube and stylette are slowly withdrawn until the stylette tip can be sensed.