DIFFICULT INTUBATION IN EMERGENCY SITUATIONS IN OBSTETRICS

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Introduction

Correct evaluation of “prognostic tests” of difficult intubation is considered mandatory, must be performed by each anesthesiologist with mandatory notes in the pre-anesthetic consultation file or in the medical chart and serves as an prove of sufficient level of professional training. However, prognostic tests do not offer absolute guarantee of easy, difficult or impossible intubation. A real evaluation of difficult airway may be given only by the anesthesiologist during direct laryngoscopy. A visual mark of the air-
way during direct laryngoscopy may be assessed using the Cormack-Lehane classifica-
tion in order to prevent complications during future surgical interventions.

However, cases of difficult intubation happen spontaneously among pregnant pa-
tients. The anesthesiologist must maintain patent airway and oxygenation by mask ven-
tilation during induction and until the muscle-relaxants will act; must perform Sellick maneuver; must avoid mucous membrane trauma (hemorrhage will make the situation even more complicated); avoid prolonged attempts. It is also important to have a well-
trained assistant.

During tracheal intubation there are three types of difficulties: impossibility to in-
troduce the laryngoscope into the oral cavity, absence of vocal cords visualization and
impossibility of maintaining adequate ventilation during intubation attempts. Intubation
should be limited to two attempts during 1 minute, with 30 seconds of ventilation preceding each attempt.

Unfortunately, our clinic lacks equipment for difficult airway, also, during emergen-
cy situations, there is no time to wait for specialists with equipment to perform rigid or
fiberoptic intubation.

We have assessed 14 cases of difficult intubation for C-sections, when there were no
other options of other types of anesthesia.

In 10 cases there were 2 attempts of tracheal intubation by the means of direct lary-
ngoscopy with Macintosh N4 blade, 2 unsuccessful attempts performed by 2 experi-
cenced specialists. In 6 cases a laryngeal mask was used, in 4 cases – combitube N4 was
used.

In one case, after combitube insertion, saturation decreased to 90-91%. After re-
peated ventilation and adequate oxygenation, a laryngeal mask was inserted.

In 4 cases, after visual assessment of the upper airway (Mallampati 4) – a deci-
sion was made to proceed directly to laryngeal mask insertion, without any attempt of
tracheal intubation. During the surgery, saturation was 98-99% with inspired oxygen
fraction of 50%. At auscultation: there were symmetrical lung sounds. All babies were
born with good Apgar score (8/8). At the end of surgery, after recovery of spontaneous
breathing and muscular reflexes – laryngeal mask and cobitube were retrieved without
any complications.

In the perioperative period no respiratory or neurological deficits / complications
were detected. All patients were in good medical condition and were discharged on
postoperative day 5 or 6.

Conclusions:

- In cases of impossible tracheal intubation by means of direct laryngoscopy and
  absence of fiberoptic equipment, an alternative method is the laryngeal mask or
  combitube insertion, if the anesthesiologist is familiar with them.
- Literature data states that neither laryngeal mask nor combitube protects 100%
  from gastric aspiration.
- According to all international recommendations, each operation block should be
  equipped with a fiberoptic bronchoscope or a videolaryngoscope, as well as with
  instrumentation of retrograde intubation of cricothyrotomy.
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