Editor—I couldn’t agree more with Tim Cook. The third generation of supraglottic airway (SGA) has not arrived, not as yet. The term, if continued to be used, will be misleading; hence, it should be abandoned forthwith. There is an agreeable overlap of features in the modern SGAs available to us. Some of them have additional safety features, such as the drain tube, while others have features to facilitate additional functions, such as endotracheal intubation, gastrointestinal endoscopy (gastro-laryngeal tube GLT; VBM), easier bending and fixing (flexi LMA and other such), preformed shaft or customized handle introducer (LMA Supreme and LMA Proseal), non-inflating cuff (i-gel), self-pressurizing cuff (Air Q SP), blocker for the oesophagus (Air Q blocker), and in-built cuff pressure monitoring (AES Ultra CPV). The classification suggested by Cook is reasonable and can give a better picture of what to expect from a relatively naive user. To conclude, a perfect classification is desirable, but if it is not available at the moment, it should not be thrust upon us without enough thought. Until then, let each device be known by the name given to it by its originator.

Declaration of interest
None declared.

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Pharmacokinetics of intranasal fentanyl in parturient

M. Kokki1,*,†, A. T. Heikkinen2, K. Raatikainen1, V.-P. Ranta1, H. Hautajärvi2 and H. Kokki1

1Kuopio, Finland, and 2Oulu, Finland

*Corresponding author. E-mail: merja.kokki@kuh.fi

Editor—Fentanyl is administered i.v. and as an intrathecal adjuvant of regional analgesia to control labour pain. Intranasal fentanyl is readily absorbed with a high bioavailability, a rapid onset of seven min and a relatively short duration of action (elimination half-life=65 min) with no active metabolites,1 but its use in pregnant patients has not been established. We have studied pharmacokinetics and –dynamics of intranasal fentanyl in 15 healthy parturient, aged 21–40 yr, with uncomplicated, full-term single gestation pregnancies. The study protocol was approved by the local ethics committee, the Finnish Medicines Agency was notified, and the study was recorded in the European Clinical Trials Database (EudraCT no. 2010-020501-32). Subjects gave written informed consent. Subjects were administered up to five doses of 50 µg of fentanyl (Instanyl® nasal spray 50 µg dose−1, Oy Leiras Takeda Pharmaceuticals Ab, Helsinki, Finland) intranasally at every 15 min when contraction pain was >5/10 (numerical rating scale (NRS) 0=no pain, 10=most pain). If pain had decreased by two or more points or if adverse effects developed, intranasal fentanyl administration was stopped. If the pain relief achieved with fentanyl was insufficient or if the subjects needed further pain relief during labour, further pain relief were provided according to the hospital standards, without fentanyl. Venous blood samples for the fentanyl analysis were obtained before the first intranasal fentanyl spray, at five, seven and a half, 10 and 15 min after the previous drug intake, after the last dose up to 180 min and the last sample at delivery. The fentanyl concentration in plasma was measured with an ultra-performance liquid chromatography system.2 Ten out of 15 subjects took 250 µg [range 100–250] cumulative dose. It seems that physiological changes, oedema during pregnancy, affect the pharmacokinetics fentanyl mucosal absorption in labouring women. The median of fentanyl concentration in plasma at 15 min after the first 50 µg dose was 0.21 ng ml−1 [0.05–0.57], (i.e. were about one third less than expected based on observations in healthy subjects having the same nasal formulation during dental surgery). The median highest concentration after the last dose was 0.79 ng ml−1 [0.26–1.38], respectively. An analgesic concentration of fentanyl 0.5 ng ml−13 was reached in 10 out of 15 subjects and was sustained between 33 and 140 min (Fig. 1). After the final dose, fentanyl concentrations in plasma declined with an apparent secondary peak in some of the subjects at one to two h after the last dose, indicating that part of the dose was absorbed from the lower pharynx or the small intestine. The decrease in contraction pain appears to be rather modest. Some efficacy was shown with a peak efficacy at 60 min, however most had

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moderate pain and only one woman reported mild pain in NRS (3/10). At these doses intranasal fentanyl was well tolerated, some fatigue was reported by five and mild sedation by two subjects during fentanyl administration. In conclusion, intranasal fentanyl up to a total dose of 250 µg may be a feasible option for maternal pain relief in situations where regional blocks are not readily available. However, a larger study is warranted to ensure maternal and fetal safety.

Declaration of interest
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Neonatal safety of maternal fentanyl during labour

M. Kokki1,*†, S. Westeren-Punnonen1,†, H. Hautajärvi2, S. Heinonen3, M. Mazzei1, S. Määttä1, E. Paalanen1 and H. Kokki1

1Kuopio, Finland, 2Oulu, Finland, and 3Helsinki, Finland

*Corresponding author. E-mail: merja.kokki@kuh.fi

Editor—Opioids are common in early stages of labour as they are highly effective for visceral and somatic pain. The main concern of opioids in labour analgesia is the neonate exposure.1 We have evaluated the early neurological outcome of the new-born infants of 15 healthy parturient, aged 21–40 yr, who were given intranasal fentanyl 100–250 µg (Instanyl® nasal spray 50 µg dose−1, 1.2 0.8 0.6 0.4 0.2 0 0 48 12 8 4 0
Fig 1 Fentanyl concentrations in parturient plasma after the last nasal dosing. The cumulative dose administered ranged between 100 and 250 µg. Lines and solid circles represent the concentrations vs time from the last nasal fentanyl dose measured before and at the time of birth, respectively. Dashed vertical line indicates the limit of quantification and the symbols below this limit are shown only to illustrate the sampling times at the time of birth.

†Principal investigators.