Background and Aims
There is no evidence on analgesia or sedation concepts during pre-operative placement of peripheral nerve block. Aim of our RCT pilot trial was to estimate the best practice approach for analgesedation for regional anaesthesia.

Methods
50 patients participated the study from 08/2020–12/2020. Computer-based randomization was performed to one of five treatment concept groups:

1. Remifentanil-Infusion (no bolus, 6–9 mcg/kg/h i.v.),
2. Fentanyl-Bolus (100 mcg i.v. for BW > 50 kg and 50 mcg for BW < 50 kg),
3. Clonidine 150 mcg bolus i.v.,
4. Lidocaine/Prilocaine topical cream 30 min prior to the puncture,
5. Placebo.

Pain intensity at skin puncture with 22-G 50 mm and 21-G 100 mm needles was the main outcome, assessed by a numeric pain scale (NRS) at the time of a needle insertion, as well as patients’ satisfaction and wellbeing (Anaesthesiological Questionnaire).

(Ethical Committee No. 31–255 ex18/19)

Results
There were no statistical differences between the baseline characteristics. No significant difference in favour of any analgesedation concept regarding pain reduction or wellbeing. Remifentanil infusion provided the lowest experienced pain levels (NRS 2.0 [1.5–3.0]) followed by Lidocaine/Prilocaine creme (NRS 2.5 [1.25–4.0]) and Placebo (NRS 2.5 [1.25–4.5]). No adverse effects (e.g., nonresponsiveness or drop in oxygen saturation or blood pressure, nerve injury) were revealed.

Conclusions
Further issue to investigate are, whether it is reasonable to reduce the pain intensity at the price of patients’ vigilance. Analgesedation with remifentanil seems to provide the lowest pain while best ensuring patients’ wellbeing. Optimal approach has to be adjusted according to the patient needs, medical personnel expertise and a hospital’s logistics.