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CORRECTION

Correction: Perfusion index in the follow-up of postoperative pain: hypertensive patient sample

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In the originally published article [1] (DOI: 10.22514/sv.2025.026), post-publication review by the Editorial Office identified several issues regarding study design description, sample size calculation, reference appropriateness, and incomplete discussion of study limitations.

In collaboration with the authors, the following corrections have been made in this Correction:

1. Study Design Description (Methods, Section 2.1)

Original text: "In this prospective randomized single-blind cohort study…"

Corrected text: "In this prospective observational cohort study…"

2. Inappropriate Citations

References [8] and [9] in the original publication were found to be suboptimally related to the statements they supported. They have been replaced with more appropriate citations, as follows:

[8] Surekha C, Eadara VS, Satish Kumar MN. Evaluation of perfusion index as an objective tool to assess analgesia during laparoscopic surgeries under general anaesthesia. Indian Journal of Anaesthesia. 2022; 66: 260–265.

[9] Saugel B, Bebert EJ, Briesenick L, Hoppe P, Greiwe G, Yang D, *et al*. Mechanisms contributing to hypotension after anesthetic induction with sufentanil, propofol, and rocuronium: a prospective observational study. Journal of Clinical Monitoring and Computing. 2022; 36: 341–347.

3. Sample Size Calculation (Methods, Section 2.6)

Original text: "The sample size was calculated using the G*power 3.1.9.4 for Windows (Open Source) package program in accordance with the study of Ahmed [8]. The effect size was calculated as 1.11 with a margin of error of 0.05 and the total number of patients was 95. A total of 100 patients were included in the study to avoid missing data."

Corrected text: "The sample size was calculated using the G*Power 3.1.9.4 for Windows (Open Source) package program, with reference to prior studies on perfusion index and postoperative pain (new reference [8]). Based on a moderate-to-large effect size (d = 0.6), a Type I error rate (α) of 0.05, and a power of 0.90, the required sample size was calculated to be 98 participants. To account for potential missing data, 100 patients were enrolled in the study."

4. Discussion of Limitations—Low Specificity of ΔPI

The following sentence has been added after the paragraph discussing the ROC analysis and predictive performance of ΔPI (near the end of the Discussion section):

"The low specificity (37%) of the ΔPI threshold suggests a high false-positive rate, which limits its standalone clinical utility for predicting postoperative pain. Clinicians should interpret ΔPI values cautiously and in conjunction with other clinical parameters rather than as a sole predictive tool."

5. Table 3—Clarification of *post-hoc* analysis

In the original article, Table 3 reported only the overall ANOVA p-value without the detailed *post-hoc* comparisons. The following *post-hoc* Bonferroni results have been clarified in this Correction:

Post-hoc Bonferroni analysis revealed that ΔPI was significantly higher in the high pain group compared to both moderate ($p < 0.001$) and low pain groups ($p < 0.005$). No significant difference was observed between moderate and low pain groups ($p = 1.000$).

Additionally, the following minor typographical errors have been identified and corrected in this Correction:

"Visuel Analogue Scale" (Abstract) → "Visual Analogue Scale"

"Basaline" (Table 1) → "Baseline"

"hypertesion" (Result section) → "hypertension"

The authors confirm that these corrections are limited to inaccuracies in study design description, sample size justification, citation appropriateness, and discussion of limitations. The underlying data, statistical analyses, results, interpretations, and primary conclusions of the study remain unchanged.

The authors sincerely apologize for these oversights and any inconvenience caused. This Correction has been approved by the Editor-in-Chief. The original article PDF remains available as published and has not been altered. Readers are advised

to refer to this Correction for the corrected references and corrected statements in the Methods and Discussion sections.

REFERENCES

[1] Duran HT, Kızılkaya M, Durak İC, Hünük O, Taştan S, Kahveci M, *et al*. Perfusion index in the follow-up of postoperative pain: hypertensive patient sample. Signa Vitae. 2025; 21: 105–110.