

# Postintervention pain levels after elective coronary angiography

Mesut Engin<sup>1\*</sup> , Ahmet Kagan AS<sup>1</sup> , Ufuk Aydın<sup>1</sup> , Yusuf Ata<sup>1</sup> , Senol Yavuz<sup>1</sup> 

Dear Editor,

We have read the article by Kılıç et al.<sup>1</sup> entitled “Comparison of pain levels of traditional radial, distal radial, and transfemoral coronary catheterization” with great interest. First of all, we congratulate the authors for their valuable contribution to the literature. However, we would like to discuss some points about postintervention pain after coronary angiography.

In this study, the authors evaluated post-procedural pain conditions according to different intervention sites in coronary angiography. The study was planned prospectively at three centers, and a total of 540 patients were included in the study (180 patients in each group according to the intervention area)<sup>1</sup>. Were the interventions performed by the same physician in each center? Did each center puncture from only one intervention site? Are groups created like this? Why were 180 patients included in each group in the study? What was the total number of coronary angiographies performed in the centers during this period? The authors stated that “The choice of approach was left to the discretion of the operator”. What are their criteria for this choice?

Patients scheduled for non-urgent coronary intervention were included in the study<sup>1</sup>. Did the patient group have a history of analgesic or antipsychotic use in the pre-intervention period? In our country, uncontrolled non-steroidal drug use is quite high. Did the authors think this may affect the study results? It is also known that post-procedural pain levels may be affected by preoperative anxiety<sup>2</sup>. For this reason, pre-procedure anxiety-reducing applications can also be performed<sup>3</sup>.

Was a pre-procedural anxiety assessment performed in this study group?

Doppler ultrasonography (DUSG) can be used as an important tool to increase the success of the intervention<sup>4</sup>. Was DUSG used on patients included in the study?

Finally, 40 patients were included in the severe pain group in the study, of whom 32 underwent distal radial artery intervention<sup>1</sup>. When we look at this patient group, the average number of punctures is approximately twice that of the other groups. According to these results, can we attribute the severe pain to the number of punctures performed? Could multivariate logistic regression analysis be done to clarify this situation? We would like to receive the valuable comments of authors on these issues.

## AUTHORS' CONTRIBUTIONS

**ME:** Conceptualization, Data curation, Investigation, Methodology, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **AKA:** Investigation, Methodology, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **UA:** Investigation, Methodology, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **YA:** Investigation, Methodology, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **SY:** Investigation, Methodology, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

## REFERENCES

1. Kılıç R, Güzel T, Aktan A, Arslan B, Aslan M, Günlü S, et al. Comparison of pain levels of traditional radial, distal radial, and transfemoral coronary catheterization. *Rev Assoc Med Bras* (1992). 2023;69(7):e20230198. <https://doi.org/10.1590/1806-9282.20230198>
2. Vaughn F, Wichowski H, Bosworth G. Does preoperative anxiety level predict postoperative pain? *AORN J*. 2007;85(3):589-604. [https://doi.org/10.1016/S0001-2092\(07\)60130-6](https://doi.org/10.1016/S0001-2092(07)60130-6)
3. Rejeh N, Tadrissi SD, Yazdani S, Saatchi K, Vaismoradi M. The effect of hand reflexology massage on pain and fatigue in patients after coronary angiography: a randomized controlled clinical trial. *Nurs Res Pract*. 2020;2020:8386167. <https://doi.org/10.1155/2020/8386167>
4. Nguyen P, Makris A, Hennessy A, Jayanti S, Wang A, Park K, et al. Standard versus ultrasound-guided radial and femoral access in coronary angiography and intervention (SURF): a randomised controlled trial. *EuroIntervention*. 2019;15(6):e522-30. <https://doi.org/10.4244/EIJ-D-19-00336>

<sup>1</sup>University of Health Sciences, Bursa Yüksek İhtisas Training and Research Hospital, Department of Cardiovascular Surgery – Bursa, Turkey.

\*Corresponding author: mesut\_kvc\_cor@hotmail.com

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none.

Received on August 03, 2023. Accepted on August 15, 2023.

