学 位 論 文 要	旨
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博士課程	第	号	氏 名	太田尾 剛
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[論文題名]

The usefulness of plasma levels of mature and total adrenomedullin as biomarkers indicating the magnitude of surgical stress responses: A single-center, prospective, observational study

(邦文題名 手術侵襲に対する反応の大きさを表すバイオマーカーとしての mature adrenomedullin 及び total adrenomedullin の血漿レベルに関する有用性:単一施設、前向き観察研究)

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「要旨]

Adrenomedullin (AM), a vasodilatory peptide, is known for its pleiotropic actions. AM levels are increased under inflammatory conditions such as sepsis and can be useful as a prognostic biomarker. The aim of this study was to investigate the changes in the plasma levels of mature AM (mAM) and total AM (tAM) observed during the perioperative period. In addition, we aimed to determine the association between each AM level and immune-inflammatory parameters to explore the usefulness of AM as a biomarker of the magnitude of surgical stress responses. The levels of both mAM and tAM were measured in blood samples obtained during the perioperative period. Sequential organ failure assessment (SOFA) and acute physiology and chronic health evaluation (APACHE) II scores, were obtained from individual clinical records. Correlations between each AM and clinical parameters were determined using Spearman's rank correlation. P<0.05 were considered statistically significant. One hundred and twenty-three patients were included in this study. There was a moderate to strong correlation between each AM and immune-inflammatory parameters, SOFA, and APACHE II. Specifically, the strongest correlation was observed between each AM and SOFA score. These findings suggest that plasma AM levels may represent the most important inflammatory mediators that are evident in surgical stress responses.