

Clinical characteristics of patients treated with debulking techniques during percutaneous coronary intervention

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Introduction: Percutaneous coronary intervention (PCI) is a procedure aimed at restoring adequate coronary flow in ischemic myocardial tissue. Conventional PCI techniques must sometimes be upgraded to so called debulking techniques (i.e. rotational atherectomy or intravascular lithotripsy) to achieve optimal results in heavily calcified lesions¹⁻³ The aim of this study was to identify clinical factors associated with a need for these debulking techniques.

Material and methods: This retrospective study included 1537 patients who were treated with PCI between 2020 and 2023. We identified 50 patients who underwent debulking methods (rotational atherectomy or intravascular lithotripsy) while 1487 patients underwent conventional PCI. Clinical data from patients were collected using institutional computer system.

Results: Patients in the debulking group were older (a difference of 4.57 years, $p=0.0006$) and were more likely to be diagnosed with hyperuricemia (difference in prevalence 8.08%, $p=0.02$). In contrast, the use of acetylsalicylic acid (difference in prevalence 15.59%, $p=0.0038$) was less prevalent in the group of patients treated with debulking methods.

Conclusion: Our results show differences in clinical characteristics of patients treated with debulking methods when compared to patients that underwent conventional PCI. Retrospective nature of our study as well as unbalanced group numbers warrant further studies. Nevertheless, this study can potentially serve as a cornerstone for future trials.

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LITERATURE

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