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In-stent restenosis risk factors following carotid artery stenting

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We have read Karaduman et al. [1] article “Predictive significance of the prognostic nutritional index for in-stent restenosis following carotid artery stenting” with great interest. First of all, we congratulate the authors for their valuable contribution to the literature. However, we would like to discuss some issues about in-stent restenosis (ISR) risk factors following carotid artery stenting (CAS).

The authors included 816 patients who underwent CAS and were followed up for 24 months in the current study. ISR occurred in 35 (4%) patients during follow-up. The prognostic nutritional index, a new marker, has been shown to be an independent predictor of ISR development [1]. However, we believe it would be beneficial to include known risk factors clearly and explicitly in the analyses investigating new markers’ prognostic values.

The authors used chronic kidney disease (CKD) as a categorical variable in their study and 138 (16.9%) of the patient cohort had CKD. The median interquartile range for creatinine values in ISR(+) and ISR(–) patients was 0.9 (0.84–1.22) and 0.96 (0.83–1.17), respectively [1]. It would be useful to clearly state how CKD is defined in the patient population where the median values are within normal limits. CKD may be an important risk factor for ISR [2].

Diabetes mellitus (DM) is an important condition that has negative effects on cardiovascular health. It has important effects on both the development and prognosis of vascular diseases [3]. In their current study, the authors stated that approximately half of the patients in both patient groups had DM. They also concluded that DM had no significant effect on ISR ($P = 0.429$) [1]. However, it is a known fact that patients with DM are more prone to stent stenosis [3]. According to the authors, what could be the reason for this similarity between the groups in their study? Could the patient groups consist of patients who have good blood glucose control?

Medical treatments applied to patients after the CAS procedure are also very important. In the current study, the rates of dual antiplatelet and statin use were determined to be approximately 40%. How were these treatments arranged during the follow-up periods after the CAS procedure? Current studies have shown that ISR development can be reduced with antiplatelet treatments arranged specifically for the individual [4]. In addition, the authors found total cholesterol values to be an independent predictor for ISR development in both multivariate analysis models [1]. Therefore, it may be useful to clearly state the anti-lipid treatments used by the patient group during the follow-up period.

The current study includes a patient group at high risk for atrial fibrillation considering both the frequency of coronary artery disease (75%) and the high mean age (median 66 years) [1]. It can occur at rates of up to 20% in normal populations between the ages of 60–70 years [5]. Could the use of anticoagulants due to atrial fibrillation in the authors' current study have affected the results of the study?

Article information

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