#### Letters to the Editor

Chronic Ischemic Heart Disease in the Elderly. Consensus Document of the Spanish Societies of Cardiology, Internal Medicine, Primary Care, and Geriatrics



Cardiopatía isquémica crónica del anciano. Documento de consenso. Sociedades Españolas de Cardiología, Medicina Interna, Atención Primaria y Geriatría

#### To the Editor.

We would like to draw attention to the above document, which was recently published simultaneously in Medicina Clínica, 1 Revista Española de Geriatría y Gerontología,2 and SEMERGEN-Medicina de familia.<sup>3</sup> Chronic ischemic heart disease affects 5% to 7% of elderly patients, and the treatment approach requires a holistic assessment including comorbidities, frailty, functional status, polypharmacy, and drug interactions. These factors are so common and significant in making patient-centered decisions that some authors consider a subspecialty of geriatric cardiology warranted.4 Asymptomatic or atypical presentation is more common in individuals older than 75 years, and a high percentage of patients cannot exercise to a level sufficient to allow interpretation of stress testing. We advocate medical treatment in most patients. This should include lifestyle modifications. Drugs are often underused in elderly patients, compliance decreases with age,<sup>5</sup> effectiveness is lower, adverse effects are more common, and there are more

treatment interruptions. Statins are not indicated for patients older than 80 years with severe comorbidity or life expectancy < 3 years, moderate to severe dementia, or significant functional deterioration. With the exception of statins, the targets for lowdensity lipoprotein cholesterol levels and other factors (heart rate, blood pressure) are similar for elderly and general adult patients, although a target blood pressure of < 160 mmHg is sometimes acceptable. In elderly patients, the decision of whether or not to perform coronary revascularization should be made with caution, as interventional procedures and surgery carry a higher complications rate. Elderly patients with chronic ischemic heart disease frequently have comorbidities, frailty, or geriatric syndromes that limit the therapeutic possibilities and confer a worse prognosis. Most elderly patients demonstrate frailty criteria. Such criteria confer a 2-4 fold increase in mortality. Cognitive decline is also very common, which can make treatment adherence difficult. Likewise, depression, which confers a worse prognosis, and other comorbidities (diabetes mellitus, kidney disease) are frequently present. A holistic biopsychosocial assessment is essential, taking into account functional assessment, frailty, cognitive function, social situation, life expectancy, and the patient's wishes and directives (Table). Such an assessment is required to balance the risk-benefit ratio and be confident that in the prognostic prediction, the competing risk associated with these geriatric conditions is not higher than that associated with the coronary disease itself.

**Table**Geriatric Factors Evaluated

	Diagnosis	Prognosis/plan
Comorbidity	DM, COPD, KD, bleeding risk, etc. Geriatric syndromes (eg, falls, incontinence)	Affect short-term and long-term outcomes Higher risk in diagnostic and therapeutic procedures
Frailty	Fried criteria Clinical Frailty Scale SPPB	Risk of more severe coronary artery disease Increased morbidity and mortality after intervention Does not necessarily mean avoiding invasive investigations or treatments; does mean more personalized care
Functional status	Katz index (basic ADLs) Barthel index Lawton index (instrumental ADLs)	Increased risk of complications and death If moderate-severe dependence, prioritize management to improve quality of life
Mental state	MMSE MoCA miniCog Depression test	Independently associated with morbidity and mortality Close follow-up, especially if depression is present
Polypharmacy	$\geq$ 5 regular medications	Risk of interactions and nonadherence Risk of side effects Sometimes, drugs must be prioritized according to which are the most important to achieve the desired effect

ADLs, activities of daily living; COPD, chronic obstructive pulmonary disease; DM, diabetes mellitus; KD, kidney disease; miniCog, Mini-Cognitive Assessment Instrument, a simple test (2 questions and drawing a clock) for screening of cognitive decline; MMSE, Mini Mental Examination; MoCA, Montreal Cognitive Assessment; SPPB, Short Physical Performance Battery (assesses balance, walking speed, and ability to rise from sitting to standing).

Fried Criteria: assesses 5 criteria (involuntary weight loss, exhaustion, low physical activity, slow walking speed, and low muscle strength); 3 or more criteria indicate frailty. Clinical Frailty Scale: scale between 1 (very fit) and 9 (terminally ill); the assessment includes different deficits, illnesses, and disabilities. Reproduced with permission from Martínez-Sellés et al.<sup>1</sup>

#### **CONFLICTS OF INTEREST**

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## Octogenarians: Too Old for Surgical Myocardial Revascularization?



# Octogenarios: ¿demasiado ancianos para revascularización miocárdica quirúrgica?

### To the Editor,

We would like to congratulate Díez-Delhoyo et al<sup>1</sup> for their work on the prognostic value of the residual SYNTAX score (rSS) in octogenarians with non-ST-elevation acute coronary syndrome, and we would like to offer some comments.

Although the study was a retrospective analysis, the findings showed rSS to be a strong prognostic predictor in these patients. The study involved patients with multivessel disease, and the preferred treatment strategy was percutaneous revascularization of the culprit lesion. The primary endpoint (combined all-cause mortality and myocardial infarction) was compared against the rSS (rSS < 8, rSS 8-20 and rSS > 20) on admission and at 6 months. For both the admission period and the 6-month period, the primary endpoint increased significantly as the rSS increased. The main finding of the study was that in the multivariable analysis, rSS was found to be the greatest predictor of the primary endpoint at 6 months (odds ratio = 9.4; 95% confidence interval, 1.61-55.1; P = .013).

The selection of revascularization strategy in octogenarians is complex, due to the patients' frailty and comorbidities and the extent of coronary disease. Therefore, percutaneous revascularization of the culprit lesion with medical management of the remaining lesions is a widely-practiced option. However, this strategy has some drawbacks:

• Identification of the "culprit lesion": in many patients with multivessel disease, a culprit lesion cannot be identified. Several studies have shown that up to 40% of patients have multiple plaques with angiographic criteria of a culprit lesion and that there is a weak correlation between the culprit lesion and the electrocardiographic and echocardiographic changes.<sup>2</sup>

- The natural history of "nonculpable lesions": in stable coronary disease, coronary lesions can remain quiescent for long periods. However, after an acute coronary syndrome, nonculpable lesions can be "activated", leading to short-term and long-term thrombotic events.<sup>3</sup>
- Complete revascularization: complete revascularization is associated with lower morbidity and mortality and is easier to perform via surgical revascularization than via percutaneous revascularization.<sup>4</sup> An rSS > 8 after incomplete percutaneous revascularization is associated with a poor prognosis,<sup>5</sup> and the study by Díez-Delhoyo et al<sup>1</sup> shows the usefulness of this score for octogenarian patients.
- Surgical vs percutaneous revascularization: several studies comparing both types of revascularization in multivessel disease included patients with non–ST-elevation acute coronary syndrome and octogenarian patients, although there are no studies on this combination of factors specifically. For more than 20 years, numerous studies have compared surgical revascularization and percutaneous revascularization (angioplasty alone, conventional stents, and first- and second-generation drugeluting stents). In general, surgical revascularization outcomes have been favorable, 4.6 particularly in patients with intermediate to high complexity for percutaneous revascularization (baseline SYNTAX score > 22), as would be the case for octogenarians.
- Surgical revascularization in octogenarians: although the inclusion of octogenarian patients in clinical trials has been limited,<sup>6</sup> recent evidence from various real-world registries also indicates surgical revascularization to be the preferred alternative to percutaneous revascularization for such patients.<sup>7,8</sup>

In conclusion, according to the available evidence, surgical revascularization is a valid therapeutic option for octogenarians with non–ST-elevation acute coronary syndrome and multivessel disease. Therefore, in the absence of specific contraindications, the advanced age of octogenarian patients should not pose an obstacle to them benefiting from surgical revascularization.