

PCI comes to age as age increasingly comes to PCI

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Percutaneous coronary intervention (PCI) has evolved as the standard procedure for the treatment of acute coronary syndromes and for the majority of situations with stable coronary artery disease. Patients aged 75 and older represent one third of those hospitalised with acute ischaemic events and account for more than half of all cardiac deaths.¹ However, evidence-based data to guide coronary revascularisation in the elderly have been limited to 1) the randomised clinical trials that routinely under-enrol elderly patients, and 2) observational studies that represent single institution experience with small samples.² Nevertheless, the Western society is an ageing population and the percentage of the population above 80 years of age, the so-called octogenarians, is rapidly increasing in Europe and will almost triple by 2050.³

Although PCI can be performed at any age, PCI in elderly patients is associated with two- to four-fold higher risks compared with younger patients.⁴ It is therefore important to provide quantitative evidence for the clinical advantage of PCI in the elderly population, such as octogenarians. One of the most important questions is which specific subgroups of octogenarians may benefit most.

The article by Günal et al. in this issue of the Netherlands Heart Journal contributes important information to the discussion on PCI in octogenarians.⁵ The article focuses on quality of life assessment and the authors used a RAND 36 Health Survey for

assessing a population which consisted of 36% acute PCI and 64% elective PCI cases. Of major importance, the one-year mortality in this cohort of octogenarians was comparably high with 38% for acute PCI patients and 12% for elective PCI patients. These complication rates are several-fold higher than in PCI populations below 80 years of age.⁶

The major finding of the article by Günal et al. was that the quality of life of the octogenarians surviving PCI for one year or more was good, i.e. comparable with the quality of life of the general population of octogenarians. This is an important piece of information. The price to pay for the octogenarian PCI population to maintain or reach an average quality of life, however, is their high overall mortality. The current study provides clear evidence that PCI offers a definite benefit for the survivors as they are doing comparably well. It is therefore important to identify and establish a better risk stratification for elderly patients undergoing PCI.

The management of octogenarians with coronary artery disease remains a major therapeutic challenge due to the higher risk of procedural complications owing to the high prevalence of associated comorbidities⁶ and elevated risk of bleeding.⁷ Clearly targeted large-scale clinical trials are needed to evaluate the relative merits of PCI as well as adjunctive therapies in the elderly (glycoprotein IIb/IIIa inhibitors, direct thrombin inhibitors, statins). Avoiding selection bias and assuring inclusion of substantial proportions of elderly patients may improve our understanding regarding optimal treatment and risk in this cohort of patients.

PCI – including primary PCI – as a treatment modality has been made generally available throughout Europe. One of the new challenges will be its availability for the whole population, including the growing group of octogenarians and beyond. Making PCI available to all those patients will largely depend on the introduction of clinical algorithms for risk prediction, safe

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treatment/anticoagulation regimes and socioeconomic considerations. In any case, there is a lot to gain for the majority of those patients. ■

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