genotypes in persons who fail to quit smoking, because their risk is still amplified considerably. First, it has been demonstrated that awareness of individual genetic susceptibility factors could potentially enhance interventions aiming at smoking cessation. Second, because the effects of ε4 may be attributable to the accumulation of small dense LDL, lipid-lowering treatment might be further intensified following detection of ε4 in smokers.

This is the first investigation to demonstrate a significant interaction between the ε4 allele at the APOE locus and current smoking as risk factors predicting cardiovascular and all-cause mortality. Future research will have to address whether or not the assessment of the APOE-genotype possibly along with other susceptibility genes will support efforts to prevent CAD by behavioural changes.

Supplementary material

Supplementary material is available at European Heart Journal online.

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References

The list of references is available in the online version of this paper.

INTERACTIVE CARDIOVASCULAR FLASHLIGHT

Clinical decision-making in a patient with mitral stenosis

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Despite the decreasing prevalence of rheumatic valve disease in Western countries, European cardiologists still need to be prepared to manage patients with chronic valvular sequelae of the disease. Using as a template a real case of a 45-year-old lady with moderate rheumatic mitral stenosis, refresh your knowledge regarding the diagnostic work-up, medical treatment, and criteria for intervention.

For how long should rheumatic fever prophylaxis be prescribed? How to manage the choice of imaging modalities? And who to refer the patient to for intervention—the interventional cardiologist or the cardiac surgeon?

You will find concise and updated answers to these and other questions exploring the full case on the ESC’s case-based learning website at http://www.escardio.org/education/eLearning/case-based.