All participants of our study fasted overnight and consumed only a croissant without filling, thus limiting the influence of fat or any surrounding food matrix on the FMD response.

We fully agree with the authors that, in vivo, the endothelial cells lining the blood vessels would not be exposed to caseins or other milk proteins. This part of the study was conducted as a supplementary line of evidence to the in vivo measurements of FMD as proof of principle. We especially attempted to identify the individual milk proteins that could diminish the effects of tea on cellular level and on vasodilation in rat aortic rings. By adding each milk protein individually in equal amounts to tea, these experiments were able to show which of the various milk proteins were inhibiting the vasodilatory effects of tea on isolated aortic rings and on NO production on endothelial cells. Since only the group of caseins actually prevented the effects of tea in vitro, our experiments evidenced that caseins complexed the physiologically active compounds in tea, long before the beverage reached the digestive tract in the body.

References

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Guidelines on the management of valvular heart disease

We have read with interest the recently published European guidelines on management valvular heart disease.1

Our attention was focussed on the section dealing with the management during pregnancy. In table 18 where general recommendations are listed, the medical therapy is favoured in most patients with regurgitant valve disease, even in symptomatic patients with a high level of evidence (IC). As it is reported beside, vasodilators should be used carefully especially in the case of angiotensin-converting-enzyme (ACE) inhibitors and angiotensin receptor blockers.

Under the ‘management strategy’ section, patients with symptomatic aortic/mitral regurgitation during pregnancy are treated medically using diuretics at the lowest dose possible to avoid impairing foetal perfusion and vasodilators.

In our point of view, guidelines should explain clearly the well-known increased risk of fetopathy related to the use of ACE-inhibitors not only during the second and third trimesters of pregnancy but also during the first trimester. When they are used in the second half of pregnancy, they can cause oligohydramnios, fetal growth retardation, pulmonary hypoplasia, joint contractures, hypocalvaria and neonatal renal failure, hypotension, and death.2,4

Infants with first-trimester exposure to ACE-inhibitors had an increased risk of major (cardiovascular and the central nervous system) congenital malformations.5 Because of its important clinical relevance, the use of ACE-inhibitors should be clearly avoided during pregnancy and guidelines should expose this fact so.

References

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Guidelines on the management of valvular heart disease: reply

We read with interest Dr Aiguir-Souto et al.’s comments regarding the recent Guidelines on the Management of Valvular Heart Disease.1

Medical management, including vasodilators, is recommended in patients with chronic regurgitant valve disease who are pregnant and have symptoms. We agree with the comment in the letter that ACE-inhibitors should be avoided during