Letters and Replies

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Polyunsaturated fatty acid (PUFA) in IgA patients

Sir,

We have read with interest the paper concerning the antiproteinuric effect of polyunsaturated fatty acid (PUFA) in IgA patients [1]. The authors mentioned that the evaluation of effectiveness of PUFA in IgA therapy gave conflicting results. Their results suggested that the hypoalbuminuric effect of PUFA was detected in the patients on ACEi/ARB therapy in which a haemodynamic-dependent factor of albuminuria was already offset. However, the haemodynamic-related beneficial effect of PUFA on albumin excretion could not be excluded in the face of our previous study in IgA patients [2].

In this study, patients were given PUFA for 12 months in a dose three times smaller than used in the patients of Ferraro et al. [1]. We also observed that the fall in protein excretion was associated with improvement of intrarenal haemodynamics, estimated as a response of GFR to dopamine infusion [2]. We therefore can speculate that long-term therapy of IgA patients with PUFA may delay the progression of renal disease via improvement of intrarenal blood flow and that was associated with a fall of NAG excretion [2]. Our findings are complementary to the paper of Ferraro et al. showing that treatment with PUFA may either reduce albuminuria or improve renal blood flow also in patients with a preserved renin–angiotensin–aldosterone system. But neither Ferraro’s study nor our study could preclude to what extend the beneficial effect of PUFA was related to improvement in the balance between vasodilator/vasoconstrictor mediators or activation of an anti-inflammatory response. Ferraro et al. revealed that the antiproteinuric effect of PUFA was more prominent in patients with more haematuria. This may implicate that the effectiveness of the therapy with PUFA is determined rather by activity of the disease per se than by concomitant therapy.

Conflict of interest statement. None declared.

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Polyunsaturated fatty acid (PUFA) in IgA patients

Sir,

Sulikowska and Manitius are right in observing that a haemodynamic-dependent effect of polyunsaturated fatty acids (PUFA) on proteinuria cannot be completely excluded in the IgA nephropathy (IgAN) patients we treated with PUFA [1]. In their study, Sulikowska et al. [2] treated 20 IgAN patients with PUFA at a dosage of 810 mg EPA and 540 mg DHA daily for 12 months and observed PUFA impact on renal haemodynamics as shown by a significant increase in the dopamine-induced response of GFR. Unfortunately, we did not look for such an effect in our patients. However, the high dosage of renin–angiotensin system blockers given to them (300 mg irbesartan plus 10 mg ramipril daily) let us think that the maximal haemodynamic-dependent antiproteinuric effect was already reached and the additional fall in proteinuria observed in patients treated with PUFA was due to other properties of PUFA. These may include the effect on the balance of the n-3- and n-6-derived eicosanoids, the anti-inflammatory activity, modulation of the endothelial function [3] or the recently reported direct inhibition of mesangial cell proliferation and TGF-β synthesis [4]. Nevertheless, all together (including Sulikowska et al. [2]) the data support the rationale for PUFA treatment in a disease characterized by a prominent mesangial involvement such as IgAN.

Finally, we disagree with their last comment. Although we are not persuaded that the severity of haematuria mirrors the activity of the IgAN, the effect of PUFA on proteinuria was not correlated with the class of erythrocyturia.

Conflict of interest statement. None declared.

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Reply

Sir,

We have read with interest the paper concerning the antiproteinuric effect of polyunsaturated fatty acids (PUFA) in IgA nephropathy: a randomized controlled trial. Nephrol Dial Transplant 2009; 24: 156–160

1. Ferraro PM, Ferraccioli GF, Gambaro G et al. Combined treatment with renin-angiotensin system blockers and polyunsaturated fatty acids