

Renal Failure



ISSN: 0886-022X (Print) 1525-6049 (Online) Journal homepage: informahealthcare.com/journals/irnf20

Evaluation of serum amyloid-A as mortality predictor in continuous ambulatory peritoneal dialysis patients

Mehmet Agilli & Fevzi Nuri Aydin

To cite this article: Mehmet Agilli & Fevzi Nuri Aydin (2015) Evaluation of serum amyloid-A as mortality predictor in continuous ambulatory peritoneal dialysis patients, Renal Failure, 37:5, 914-914, DOI: 10.3109/0886022X.2015.1022850

To link to this article: https://doi.org/10.3109/0886022X.2015.1022850





http://informahealthcare.com/rnf ISSN: 0886-022X (print), 1525-6049 (electronic)

Ren Fail, 2015; 37(5): 914 © 2015 Informa Healthcare USA, Inc. DOI: 10.3109/0886022X.2015.1022850



LETTER TO THE EDITOR

Evaluation of serum amyloid-A as mortality predictor in continuous ambulatory peritoneal dialysis patients

Mehmet Agilli¹ and Fevzi Nuri Aydin²

¹Department of Biochemistry, Agri Military Hospital, Agri, Turkey and ²Department of Biochemistry, Sirnak Military Hospital, Sirnak, Turkey

We read with great interest the article by Jovanovic et al.¹ entitled "Inflammatory markers as mortality predictors in continuous ambulatory peritoneal dialysis patients" in which the investigators reported that in continuous ambulatory peritoneal dialysis patients, serum amyloid-A (SAA) was the most significant independent mortality predictor among the analyzed inflammatory factors as C reactive protein, fibrinogen, erythrocyte sedimentation rate, and leukocytes. We thank the authors for their detailed report. However, we wish to make some comments on SAA.

SAA is an acute phase protein, which is synthesized primarily in liver in response to stimulation by proinflammatory cytokines such as tumor necrosis factor alpha (TNF- α), interleukin-1 (IL-1), and IL-6.2 Previous studies suggested that certain diseases such as rheumatic disorders (rheumatoid arthritis, ankylosing spondylitis), major depression, auto inflammatory diseases (familial Mediterranean fever, Hashimoto's thyroiditis), diabetes mellitus, systemic lupus erythematosus, acute pancreatitis, inflammatory bowel diseases, psoriasis, several types of vasculitis, and epilepsy affect SAA levels.^{3,4} In addition to above diseases, statins, glucocorticoids, corticosteroids, disease-modifying antirheumatic drugs, and nonsteroidal anti-inflammatory drugs could alter SAA levels.^{5,6} Also, dietary supplements such as vitamin A, vitamin E, antioxidants (ascorbic acid, taurine, phytic acid), omega-3 fatty acids, a linoleic acid, and polyunsaturated fatty acids can influence SAA levels.^{7,8} In this regard, without defining these contributing factors, interpreting the results is problematic

Smoking status and alcohol use are other confounding factors for SAA measurement. Therefore, these factors have to be expressed and a multivariate regression analysis should be applied to show whether these variables have an impact on SAA levels.

In conclusion, though this study contributes valuable information to the medical literature, clarifying these concerns will certainly provide a clearer picture when interpreting SAA levels among participants.

Declaration of interest

The authors declare no conflicts of interest.

References

- Jovanovic DB, Stosovic MD, Gojakovic BM, et al. Inflammatory markers as mortality predictors in continuous ambulatory peritoneal dialysis patients. *Ren Fail*. 2015;37:230–236.
- Ahmed MS, Jadhav AB, Hassan A, Meng QH. Acute phase reactants as novel predictors of cardiovascular disease. *ISRN Inflamm*. 2012;2012:953461.
- 3. Obici L, Raimondi S, Lavatelli F, Bellotti V, Merlini G. Susceptibility to AA amyloidosis in rheumatic diseases: A critical overview. *Arthritis Rheum.* 2009;61:1435–1440.
- Li G, Ren F, Yao J, Wang M, Feng X, Liu D. Human serum amyloid A (SAA) protein changes in acute epilepsy patients. *Int J Neurosci.* 2013;123:265–268.
- Fushimi T, Takahashi Y, Kashima Y, et al. Severe protein losing enteropathy with intractable diarrhea due to systemic AA amyloidosis, successfully treated with corticosteroid and octreotide. *Amyloid*. 2005;12:48–53.
- 6. Horiuchi Y, Hirayama S, Soda S, et al. Statin therapy reduces inflammatory markers in hypercholesterolemic patients with high baseline levels. *J Atheroscler Thromb*. 2010;17:722–729.
- Giugliano D, Ceriello A, Esposito K. The effects of diet on inflammation: Emphasis on the metabolic syndrome. *J Am Coll Cardiol*. 2006;48:677–685.
- Spreafico A, Millucci L, Ghezzi L, et al. Antioxidants inhibit SAA formation and pro-inflammatory cytokine release in a human cell model of alkaptonuria. *Rheumatology (Oxford)*. 2013;52:1667–1673.