Neutrophil gelatinase-associated lipocalin NGAL
Dipstick test in Peritoneal Dialysis patients with peritonitis

Matteo Marcello b,c, Sabrina Milan Manani a,b, Grazia Maria Virzì a,b, Davide Marturano b,d, Ilaria Tantillo a,b, Valentina Corradi a,b, Massimo De Cal a,b, Francesca Martino a,b, Anna Giuliani,a,b, Davide Giavarina f and Claudio Ronco a,b,d

a Department of Nephrology, Dialysis and Transplant, St Bortolo Hospital, Vicenza, Italy; b IRRIV- International Renal Research Institute, Vicenza, Italy; c Libera Università Vita Salute San Raffaele, Milano, Italy; d DIMED, University of Padova, Padova, Italy; f Department of Clinical Chemistry and Hematology Laboratory, San Bortolo Hospital, Vicenza, Italy

INTRODUCTION

Neutrophil gelatinase-associated lipocalin (NGAL) is a lipocalin that plays a role against pathogens. NGAL is elevated in the peritoneal dialytic effluent (PDE) of peritoneal dialysis (PD) patients with peritonitis.

The aim of this study is to compare a novel peritoneal NGAL point-of-care test (POCT) with the laboratory-based NGAL test and with white cell count in PDE.

RESULTS

We observed a positive linear correlation between peritoneal NGALds and the peritoneal laboratory-based NGAL and between peritoneal NGALds and white cell count in PDE (all p<0.01).

Peritoneal NGALds levels were higher in patients with peritonitis compared with patients without (p < 0.01).

CONCLUSION

Peritoneal NGALds was consistent with the peritoneal laboratory-based NGAL and with white cell count in PDE. In conclusion, it is an user-friendly test that provides timely results, useful in particular at the point of care.

BIBLIOGRAPHY
