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Disclosure Information:

Gianluigi Ardissino, MD

No, neither I nor my spouse/partner have anything to disclose.

Sara Testa, MD

No, neither I nor my spouse/partner have anything to disclose.

Antonio Mastrangelo, MD

No, neither I nor my spouse/partner have anything to disclose.

Fabio Paglialonga, MD

No, neither I nor my spouse/partner have anything to disclose.

Bianca Bottasso, BS

No, neither I nor my spouse/partner have anything to disclose.

Armando Tripodi, MD

No, neither I nor my spouse/partner have anything to disclose.

Piera Castorina, MD

No, neither I nor my spouse/partner have anything to disclose.

Nicolò Borsa, BS

No, neither I nor my spouse/partner have anything to disclose.

Silvana Tedeschi, MD

No, neither I nor my spouse/partner have anything to disclose.

Alberto Edefonti, MD

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Title: URINAY D-DIMER IN HEMOLITYC UREMIC SYNDROME

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Body: Relapses of atypical Hemolytic Uremic Syndrome (aHUS) are sometimes difficult to diagnose promptly because symptoms are milder than at onset; in particular platelet decrease is often absent and hemolysis as well as serum creatinine increase are not clearly expressed at the beginning; this can cause a delay in the diagnosis of relapse and consequently in establishing an early treatment.

We have measured urinary d-dimer (uDD) in HUS with the working hypothesis that, in a thrombotic microangiopathy taking place in the glomeruli, uDD should be significantly higher than in healthy controls or in other kidney diseases. As a start, uDD was measured by ELISA DDimer Zymutest (Hyphen, SWI), as uDD/urinary creatinine (uCr) ratio, in a urine sample of 11 HUS patients (5 males, mean age 8.8 ± 10.1) during the acute phase, in 15 patients with glomerular diseases (8 with nephrotic syndrome, 4 with glomerulonephritis, 3 with CKD II-V; 12 males, mean age 10.7 ± 7.6), in 7 recipients of kidney transplantation (6 males, mean age 15 ± 4.8) and in 16 controls (10 males, mean age 6.3 ± 4.2 ; 5 with febrile URTI). Results among groups were compared by ANOVA and are presented as mean \pm SD. uDD/uCr ratio was significantly ($p=0.01$) higher in patients with HUS (9.36 ± 11.6) as compared to glomerular diseases (2.65 ± 8.6), to recipients of kidney transplantation (1.17 ± 2.1) and to controls (0.01 ± 0.04). We conclude that uDD is a promising indicator for detecting thrombotic microangiopathy involving the glomeruli and further investigations focused on relapses of aHUS might lead us to better define the sensitivity and specificity of uDD in this very setting.

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