



Proteinuria in Elderly Hospitalized Patients with Acute Urinary Tract Obstruction

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Abstract:

Transient proteinuria is frequent in various clinical kidney pathologies and can be a result of tubular damage. As Urinary Tract Obstruction (UTO) can induce tubular injury, we hypothesized that UTO can cause transient proteinuria. The aims of this study were to determine whether patients with UTO have a higher incidence or severity of proteinuria compared with catheterized patients without UTO, and whether such proteinuria resolves at short term follow up. The study was a prospective, matched case-control study, that included 50 patients with acute UTO and 50 controls. Proteinuria was quantified using three consecutive 24 hour urinary collections and its incidence, severity, and quantitative changes were compared between the study groups. Results: There were no statistically significant differences between the groups in age (83.12 ± 7.94 versus 84.48 ± 9.39 ($p=0.44$)), major comorbidities, chronic medical treatment and causes of hospitalization. Abnormal proteinuria was observed in all patients with UTO and 94% of the control group. The degree of proteinuria was similar between groups in first, second and third collections (638.07 ± 419.69 vs. 620.99 ± 639.57 , 828.43 ± 743.15 vs. 648.69 ± 741.48 , and 728.30 ± 944.76 vs. 732.80 ± 841.8 mg/24 hours; $p=0.88$, 0.23 and 0.99 , respectively). Proteinuria did not change significantly during a week of in-hospital follow up in



either study group ($p=0.19$ for trend). Conclusion: This study demonstrated a very high incidence of significant proteinuria in a cohort of hospitalized elderly patients either with or without UTO. Proteinuria does not resolve in the early period after relief of UTO. Future study with longer follow up is needed to determine if this proteinuria resolves or persists following hospital discharge and if it has long-term prognostic significance.

Biography:

Reuven Friedmann is currently associated with Shaare Zedek Medical Center, Israel

Recent Publications:

1. <https://doi.org/10.1046/j.1365-4362.1999.00770.x>