

# **A Replication Study of the Efficacy of Locally Manufactured Peritoneal Dialysis Fluid for End-Stage Renal Disease in an Egyptian Clinical Setting: A Randomised Controlled Trial**

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A, h, m, e, d, E, l, -, S, a, y, e, d, ,, M, o, n, a, H, a, s, s, a, n, ,, Y, o, u, s, s, e,  
f, A, b, d, e, l, -, M, a, l, e, k

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## | Abstract

Peritoneal dialysis is an important renal replacement therapy for end-stage renal disease. An earlier study reported the efficacy of a specific locally manufactured peritoneal dialysis fluid in Egypt. This replication study assesses the generalisability of those findings to a different clinical environment. The primary objective was to replicate the evaluation of the efficacy and safety of a locally manufactured peritoneal dialysis fluid for managing end-stage renal disease in a new setting. Secondary objectives were to assess its impact on biochemical parameters, peritonitis incidence, and patient survival. A randomised controlled trial was conducted at a tertiary hospital in Egypt. Adult patients with end-stage renal disease commencing peritoneal dialysis were randomly assigned to receive either the locally manufactured fluid (intervention) or a commercially available fluid (control). Participants were followed for a standardised period, with monitoring of clinical outcomes, laboratory measures, and adverse events, adhering to the original study's protocol. This replication study is ongoing. Data collection and analysis are in progress; therefore, no empirical results are available for this abstract. Findings will be reported in the full manuscript upon completion. No conclusions can be drawn pending the completion of data analysis. The final conclusions will determine if the original study's findings on the fluid's efficacy are supported in this replication context. Until final results are available, clinical practice should

follow existing evidence and local protocols. Further replication studies in diverse settings are warranted to strengthen the evidence for locally produced medical supplies. Replication study, peritoneal dialysis, end-stage renal disease, locally manufactured, randomised controlled trial, Egypt This study contributes to the validation of clinical research findings in nephrology through methodological replication.

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