Electronic Supplementary Material (ESI) for Nanoscale Advances.

Supporting Information

Titanate nanotubes as an efficient oral detoxifying agent against drug overdose: application in rat acetaminophen poisoning

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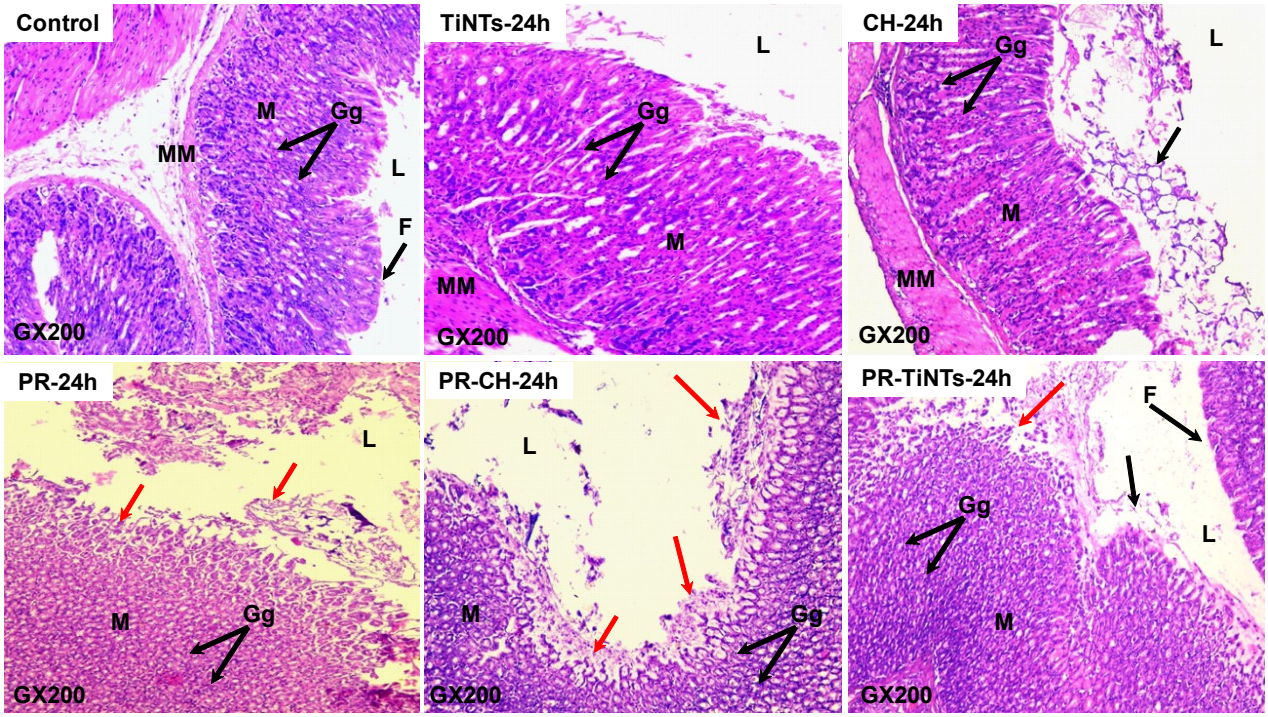

Figure S1 Histological sections of rat gastric mucosa after 24 h of Ringer, TiNTs, CH (negative controls), PR (positive control), PR-TiNTs and PR-CH administration. Red arrows indicate ulcer formation and cellular desquamation (M: Mucoca, MM: Muscularis Mucosae, F: Foveolar, Gg: Gastric glands, and L: Lumen).

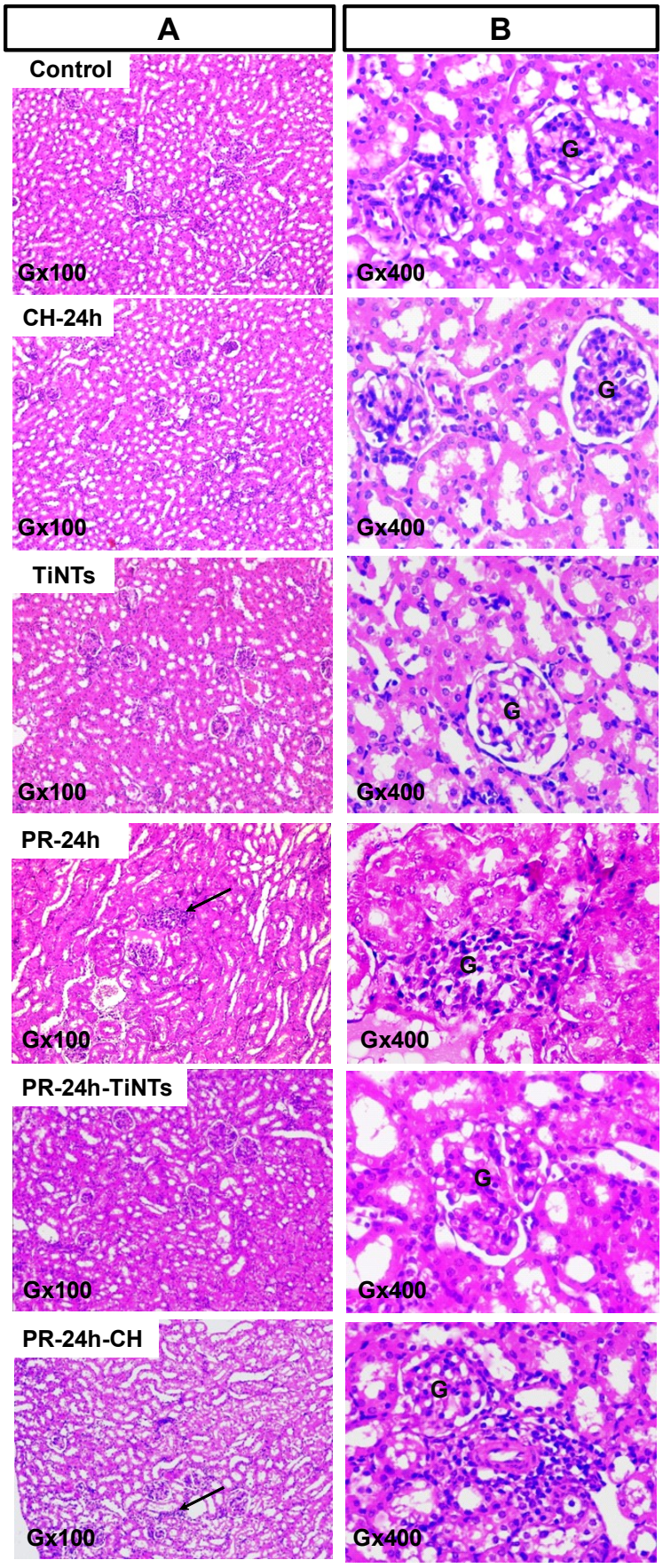

Figure S2 (A) Histological sections of rat kidneys after 24 h of Ringer, TiNTs, CH (negative controls), PR (positive control), PR-TiNTs and PR-CH administrations. Sections are stained with H&E. **(B**) is magnification of **(A).** G= glomerulus. Arrows indicated neutrophiles infiltration.

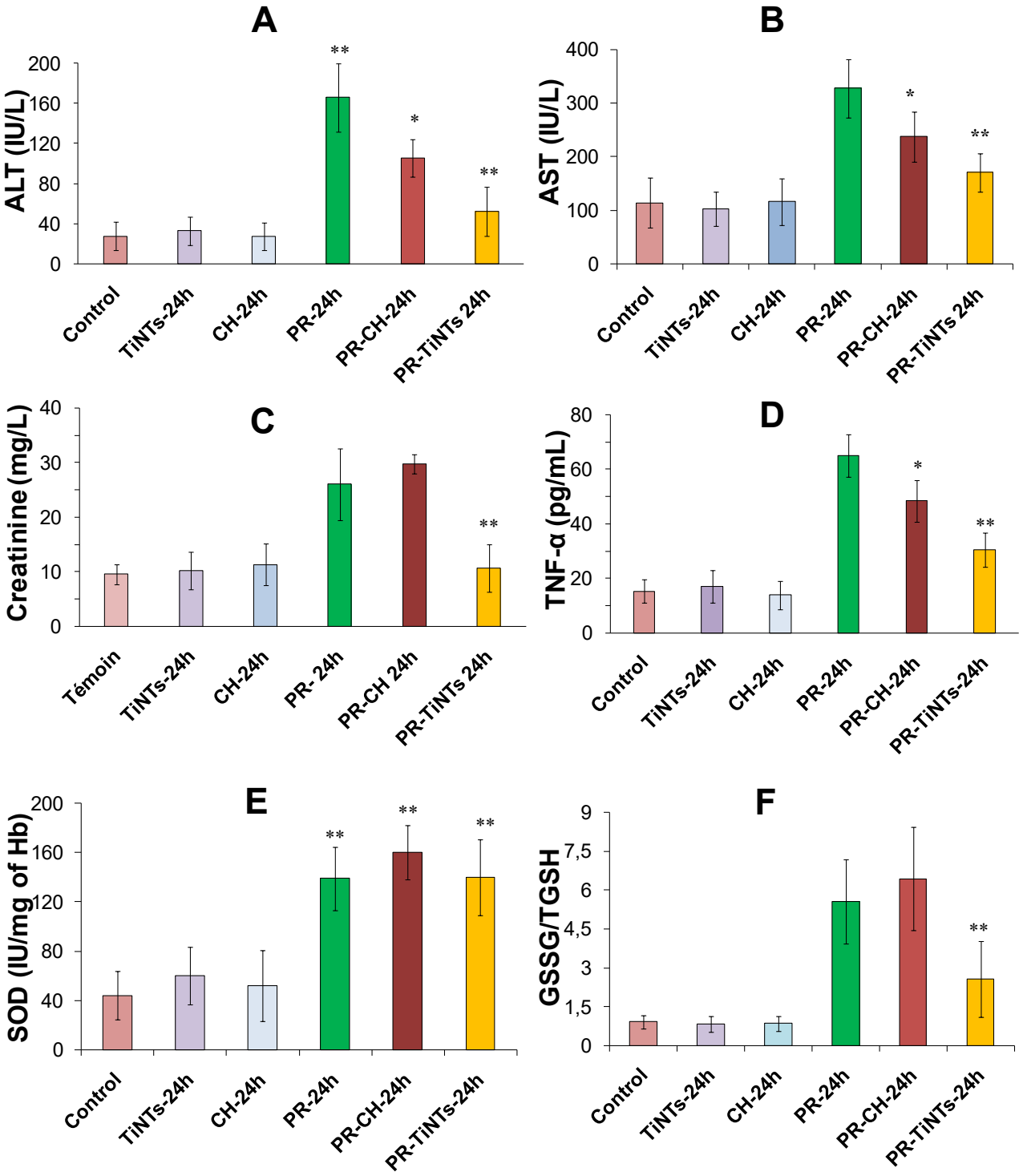

Figure S3 Serum levels of biochimechal markers of animals after 24h of Ringer, TiNTs, CH (negative controls), PR (positive control), PR-TiNTs and PR-CH orally administrations: **(A)** alanine aminotransferase (ALT), **(B)** aspartate aminotransferase (AST), **(C)** Creatinine, **(D)** TNF-α, **(E)** Superoxide dismutatse (SOD) and **(F)** circulating levels of oxidized glutathione/total glutathione ratio (GSSG/TGSH). Data are the mean ± SD for six rats. Statistical significance was determined by Tukey HSD test (*p<0.05, ** p<0.01).

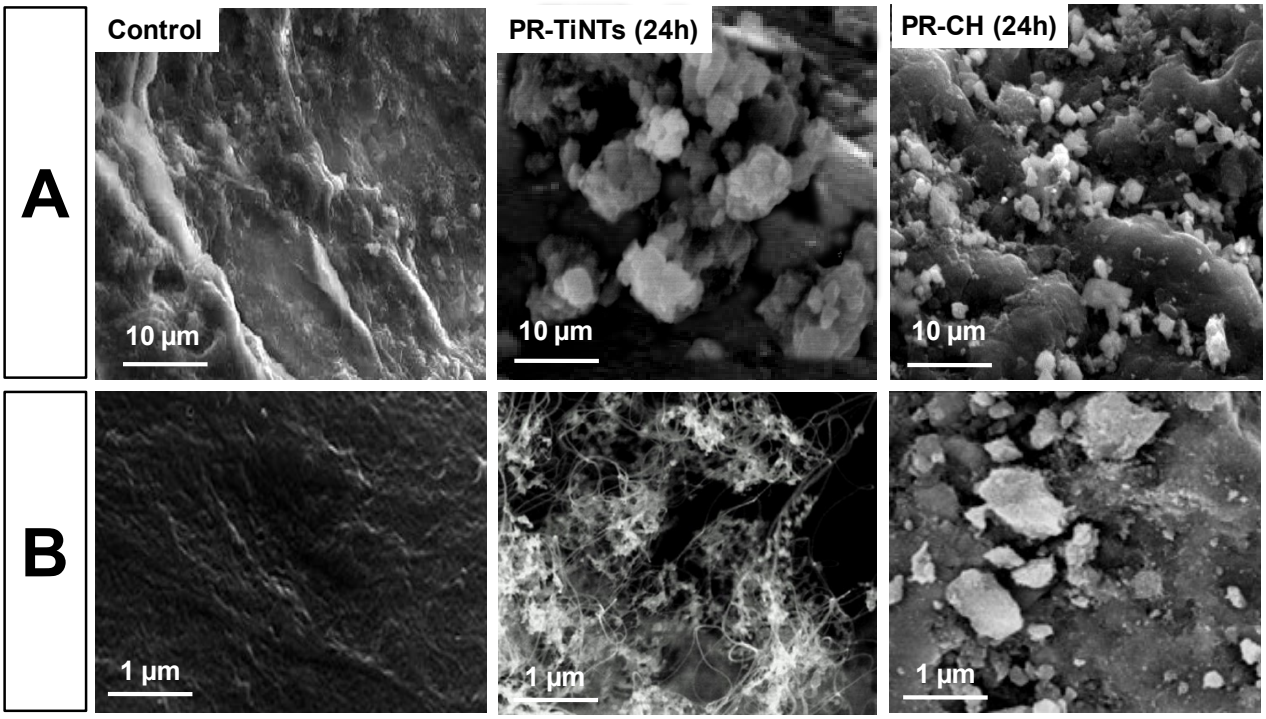

Figure S4 FEG-SEM images of feces of control animals and animals overdosed with PR and treated with TiNTs (PR-TiNTs) or activated charcoal (PR-CH) for 24h showing the presence of TiNTs or CH aggregates. **B** is a magnification of **A.**