

Table S1. Medications during 24-hour urine collections.

	Case 1	Case 2
	Pre-Empagliflozin	
Medications	insulin glargine 100 units daily insulin aspart 10 units with meals semaglutide 1 mg once weekly losartan 25 mg daily atenolol 50 mg daily spironolactone 25 mg daily amlodipine-atorvastatin 5-40 mg daily aspirin 81 mg daily apixaban 5 mg twice daily Intravenous MgSO ₄ *	famotidine 20 mg BID metformin SA 500 mg daily cholecalciferol 25 mcg daily insulin glargine 30U nightly lisinopril 40 mg daily glipizide 10 mg BID tamsulosin 0.4 mg daily rosuvastatin 40 mg daily alogliptin 25 mg daily magnesium EC tab 140 mg BID magnesium oxide 400/800/400 mg TID
	Post-empagliflozin	
Medications	aspirin 81 mg daily amlodipine 5 mg daily apixaban 5 mg BID atorvastatin 40 mg daily atenolol 50 mg daily chelated magnesium 300 mg TID empagliflozin 10 mg daily gabapentin 300 mg TID insulin aspart 13 units TID, insulin glargine 100 units daily losartan 25 mg daily semaglutide 1 mg once weekly spironolactone 25 mg daily vitamin D3 2000 units daily	famotidine 20 mg BID metformin SA 500 mg daily cholecalciferol 25 mcg daily insulin glargine 30U nightly lisinopril 40 mg daily glipizide 10 mg BID tamsulosin 0.4 mg daily rosuvastatin 40 mg daily alogliptin 25 mg daily empagliflozin 12.5 mg daily magnesium oxide 400mg BID

*Intravenous MgSO₄ 4 to 6 grams, varying from once a week to twice a month regimen, to avoid symptomatic hypomagnesemia.

Table S2. 24-hour urine study calculations of creatinine clearance, fractional excretion of magnesium (FEMg), and the filtered load of magnesium, pre-and-post-SGLT2 inhibitor use.

Case 1			
Pre-Empagliflozin		Post-empagliflozin	
uMg (mg/dl)	3.5	uMg –mg/dl	5.12
sMg (mg/dl)	1.3	sMg (mg/dl)	2
uCr (mg/dl)	67.18	uCr (mg/dl)	43
sCr (mg/dl)	0.8	sCr (mg/dl)	0.98
Cr Cl (ml/min)	93.31	Cr Cl (ml/min)	76.18
FEMg	4.622%	FEMg	8.378%
Filtered Mg load (mg/min)	1.21	Filtered Mg load (mg/min)	1.52
Case 2			
Pre-Empagliflozin		Post-empagliflozin	
uMg (mg/dl)	4.32	uMg –mg/dl	4.4
sMg (mg/dl)	1.5	sMg (mg/dl)	1.7
uCr (mg/dl)	97.3	uCr (mg/dl)	95
sCr (mg/dl)	1.2	sCr (mg/dl)	1.1
Cr Cl (ml/min)	104.17	Cr Cl (ml/min)	119.95
FEMg	5.058%	FEMg	4.277%
Filtered Mg load (mg/min)	1.56	Filtered Mg load (mg/min)	2.03

uMg and uCr represent urinary magnesium and creatinine concentrations measured in 24-hour urine collections, and sMg and sCr represent serum magnesium and creatinine levels, respectively. Cr Cl, creatinine clearance calculated using $Cr\ Cl = [uCr \times V] / sCr$. FEMg was calculated as $100 \cdot (uMg \cdot sCr) / (0.7 \cdot sMg \cdot uCr)$. Filtered Load = Glomerular Filtration Rate x Plasma Concentration. 24-hour urine study was performed 48 hours after the last dose of IV MgSO₄ during the pre-empagliflozin period in Case 1.