**Introduction and Aims:** The measurement of the Kt/V has been validated to demonstrate the minimum doses of dialysis required to diminish the mortality among patients receiving dialysis. By now, few studies have been focused in the presence of complications among patients in peritoneal dialysis (PD) according to the clearance goals by the peritoneal Kt/V and clearance of creatinine (CCr). Aim: to determine if the peritoneal Kt/V and CCr predicts the presence of complications in patients undergoing PD.

**Methods:** Single center descriptive study. In patients undergoing PD, weekly Kt/V and CCr were measured either in anuric and those with significant residual kidney function (urine output up to 100 milliliters per day). We determine the presence of anemia according to KDOQI guidelines; malnutrition by hypoalbuminemia; calcium - phosphorus index was calculated; systolic and diastolic arterial tension were graded according to the JNC 8 Report; the actual dose of erythropoietin prescribed was recorded and erythropoietin resistance index was obtained. Patients in either continuous ambulatory peritoneal dialysis (CAPD) or automated peritoneal dialysis (APD) were eligible.

**Results:** 124 patients enrolled. The median age was 39 years (range 18 - 78 years), with a predominance of younger than 50 (64.3%). 91 (73.4%) were male, 94 (75.8%) were in CAPD and 56% had residual kidney function. From the total of patients, just 28 (22.5%) achieve both goals (Kt/V and CCr), and 56 (45.1%) fail to achieve both goals (Table 1).

| Media of weekly peritoneal Kt/V was 1.47, and CCr was 48.4 liters/week. Kidney clearance was important to improve CCr goals (p<0.003), but had no relevance in Kt/V. As shown in Table 2, Kt/V was not predictor of better outcomes. CCr was predictor of a lower calcium - phosphorus index (p=0.006) and diastolic arterial tension (p=0.02). Anuric patients who achieve both Kt/V and CCr had less hypoalbuminemia (p=0.02) and better level of diastolic arterial tension (p=0.04).

**Conclusions:** Peritoneal Kt/V was not predictor of PD related complications. CCr was related with better calcium - phosphorus index and lower diastolic arterial tension. Residual kidney function is important to achieve only the CCr goal, and it was associated with less anemia, erythropoietin resistance and calcium - phosphorus index.