Objective: The aim of the present study was to evaluate Serum receptor activator of nuclear factor-κ B ligand (sRANKL), osteoprotegrin (OPG) and intact parathyroid hormone (iPTH) as the main factors for vascular calcification and inflammation in hemodialysis (HD) and renal transplant (RT) patients.

Method: Serum was obtained from 45 stable chronic HD patients and 44 stable RT recipients. Biochemical factors, iPTH, OPG, sRANKL levels were determined by standard methods.

Results: Osteoprotegrin (P = 0.001) and intact parathyroid hormone (P = 0.001) levels in the hemodialysis patients were higher than the renal transplant recipients. Osteoprotegrin had positive correlation with duration of dialysis and age in the hemodialysis (r = 0.88, P = 0.001 and r = 0.34, P = 0.02, respectively) and renal transplant patients (r = 0.92, P = 0.001 and r = 0.46, P = 0.001, respectively).

Conclusion: Hemodialysis patients have higher osteoprotegrin levels than the renal transplant recipients. It may act as a protective factor for renal osteodystrophy or only as a secondary phenomenon of advanced renal failure.

Presentation: Poster