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## Evaluation of arterial stiffness by tonometry applanation in patients with end stage renal disease

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**Introduction:** Cardiovascular disease remains the leading cause of mortality in patients with end stage renal disease. This is especially due to observed hardening (sclerosis) and thickening of the artery walls, often asymptomatic revealing a symptom or sometimes fatal acute accidents.

**Materials & Methods:** Our study is prospective, observational comparative and mono-centric. It is to assess cardiovascular risk by measuring the VOP (pulse wave) through a non-invasive method with our terminal chronic renal failure patients on hemodialysis and peritoneal dialysis. We studied 60 dialysis patients divided into 2 groups: Group 1: 30 hemodialysis patients and Group 2: 30 patients on peritoneal dialysis. The recording of the VOP in patients was made outside the dialysis sessions and concerned patients on dialysis for more than 02 years.

**Discussion:** In our series, the initial nephropathy was the most frequently found vascular nephropathy. We have them over lesions type of arterial stiffness in hemodialysis patients.

**Conclusion:** Arterial stiffness increases with age and worsen in the presence of risk factors (hypertension, diabetes, obesity, smoking, chronic inflammatory syndrome, etc.). A pharmacological therapeutic intervention (anti hypertensives, antidiabetic statins) and non-pharmacological (reduction in salt intake, weight loss, exercise, etc.) can stop this arterial stiffness in our patients on peritoneal dialysis or hemodialysis.

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