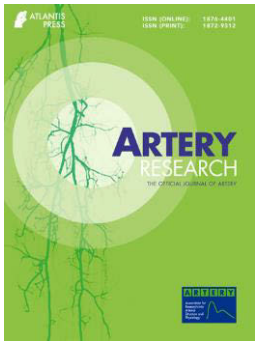

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P108: IMPACT OF KIDNEY TRANSPLANTATION ON AORTIC STIFFNESS INDEX β0

Marie-Pier Desjardins, Aboubacar Sidibé, Catherine Fortier, Fabrice Mac-Way, Sacha De Serres, Richard Larivière, Bart Spronck, Mohsen Agharazii

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Conclusion: Oscillometric measurement of 24-hour pulse wave velocity is a simple and valid method and has an additional predictive value for all-cause mortality in elderly patients with end-stage renal disease.

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P108
IMPACT OF KIDNEY TRANSPLANTATION ON AORTIC STIFFNESS INDEX β0

Marie-Pier Desjardins [1], Aboubacar Sidibé [1], Catherine Fortier [1], Fabrice Mac-Way [1], Sacha De Serres [1], Richard Larivière [1], Bart Spronck [2], Mohsen Agharazii [1]

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Purpose/ Background/ Objectives: We have shown that aortic stiffness improves as early as 3 months post-kidney transplantation (KTx). Aortic stiffness index β0, a blood pressure independent parameter, has been proposed to be a better indicator of vascular wall property. This study was designed to examine 1) the early versus late changes in aortic stiffness index β0 and 2) to define the characteristics of patients with favourable and unfavourable trajectories of aortic stiffness index β0 after KTx.

Methods: In 79 patients who underwent KTx, aortic stiffness was assessed before, 3, 6 and 24 months after KTx. Aortic stiffness was determined by carotid-femoral pulse wave velocity (cf-PWV), while aortic stiffness index β0 was obtained using a formulae proposed by Spronck and colleagues. Cytokines profile was measured in plasma by ELISA.

Results: There was a reduction of β0 3 months after KTx (29.0 ± 2.0 to 25.8 ± 1.2, $P = 0.033$). Then, aortic stiffness index β0 gradually increased at 6 (28.0 ± 1.4, $P = 0.005$ vs 3 months) and 24 months (28.3 ± 1.3, $P = 0.003$ vs 3 months). Unfavourable progression of β0 was not related to renal function, age, comorbidities or kidney donor characteristics. However, the unfavourable progression of β0 was associated with higher levels of interleukin-6 ($P = 0.029$).

Conclusions: The improvement of aortic stiffness index β0 3 months after KTx suggests that KTx leads to an early improvement of the intrinsic mechanical properties of aorta.

However, this improvement is followed by a late progression of β0, which is associated with increased pro-inflammatory cytokine, suggesting that activation of immune system may be involved in arterial wall remodeling in kidney transplant recipients.

P109
PROGRESSION OF AORTIC ARCH CALCIFICATION AFTER KIDNEY TRANSPLANT AND ITS IMPORTANCE IN PREDICTING CARDIOVASCULAR RISK: SINGLE-CENTER 2-YEAR FOLLOW-UP STUDY

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