Decision making in donors with metabolic syndrome

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As the top rank of treated ESRD in Taiwan, we have a long waiting list for kidney transplant (KTx), the willingness of transplant centers increases to accept complex donors, eg. metabolic syndrome (MS). The MS is a cluster of the most dangerous heart attack risk factors including central obesity, high blood pressure, hyperglycemia, hypertriglyceridemia, and low levels of high-density lipoprotein (HDL). In Taiwan, 25.5% of men and 31.5% of women have MS, and its prevalence is increasing. Guidelines for the evaluation of living kidney donors exist but do not provide clear guidance when evaluating the complex donor. We expand criteria for living donors of MS in the past 10 years to increase RTx. Donor candidates with well-controlled hypertension (HTN) with BP<130/85 mmHg with treatment is not considered a contraindication to living kidney donation, but avoided in organ damage with LVH, hypertensive retinopathy, microalbuminuria. Donor candidates with obesity and overweight should have to control BMI<30kg/m² and careful review their health condition to avoid cardiovascular risk in perioperative care. Donor candidates with dyslipidemia should be measured and adequate management for their greater risk for future diabetes and cardiovascular disease. Donor candidates with prediabetes or type 2 diabetes should be counseled that their condition may progress over time and may lead to end-organ complications. The delicate evaluation of microalbuminuria, diabetic retinopathy and cardiovascular risk is crucial. On the other hand, renal biopsy may be more accurate diagnosis of donor kidney in affecting by MS. As the shortage of donor pool, we review the transplant guidelines for donor screening and consider the risk of end-organ complications in MS and additional ethnic and nonethnic factors to expand the donor candidates. Longer follow-up, especially in MS donors, is needed to address the question about to increase diabetic nephropathy or CVD in them.