Gender and restenosis after coronary artery stenting.

AIMS: To examine the impact of sex on restenosis in a large cohort of consecutive patients undergoing coronary stenting and systematic angiographic and clinical follow-up. METHODS AND RESULTS: The study includes a cohort of 4374 consecutive patients (1025 women and 3349 men), undergoing coronary stenting for stable or unstable angina. Follow-up angiography at 6 months was performed in 80% of patients. Clinical events were assessed for a period of 1 year after the procedure. Main end-points of the study were angiographic and clinical restenosis at follow-up. Compared to men, women were older, presented more often with diabetes, smaller vessel size and shorter lesions. Clinical restenosis (need for reintervention) was found in 14.8% of women and 17.5% of men (P=0.048). The incidence of angiographic restenosis was significantly lower in women than in men (28.9% vs 33.9%, respectively, P=0.01). After adjustment for other covariates, women presented a 23% reduction of the risk of restenosis: odds ratio 0.77 (95% confidence interval 0.63 to 0.93). While a small vessel size was a risk factor for restenosis in both sexes, the influence of diabetes on restenosis was mostly confined to women. CONCLUSION: Compared with men, women present a lower risk of restenosis after coronary stenting despite a more preponderant presence of two major risk factors for restenosis, diabetes and small vessel size. There are
sex-based differences in predictive factors of restenosis with diabetes having a particularly strong impact in women.