In a multivariable linear regression analysis previous CABG, the arterial access site, gender, age and history of diabetes or hypertension were found to be independent predictors of radiation exposure during diagnostic coronary angiograms. The independent predictors of radiation dose during percutaneous coronary interventions were the Syntax score, gender, age, arterial access site and diabetes.

**Conclusions:** Radial access relates to modest but significant increase in radiation exposure during both diagnostic and interventional coronary procedures. It is an independent predictor of radiation exposure.

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**Impact of stent strut thickness on arterial healing after drug-eluting stents implantation assessed by optical coherence tomography**

T. Tada, R.A. Byrne, A. Dimopoulos, L. King, Y. Li, M. Joner, A. Kastrati. German Heart Center Munich, Germany

**Purpose:** We have previously shown that stents with thinner-struts are associated with a reduced rate of restenosis after bare metal stenting. The aim of this study was to evaluate the impact of stent strut thickness on arterial healing after drug-eluting stent (DES) implantation as assessed by optical coherence tomography (OCT) at 6-8 months follow-up.

**Methods:** We included 72 patients with 80 de novo lesions undergoing DES implantation and OCT follow-up at 6-8 months after stent implantation at 2 centers in Munich, Germany. Patients were stratified according to total strut thickness (strut thickness plus coating thickness) as thin-strut DES (<100 μm thickness; n=37), Orsiro sirolimus-eluting stents, Xience everolimus-eluting stents) or thick-strut DES (>100 μm thickness; n=35), Yucan PC Choice sirolimus-eluting stents, Resolute zotarolimus-eluting stents, Nobori-biollimus-eluting stents). The primary endpoint was the rate of uncovered struts at follow-up. To account for clustering of the data, stratified level data in both groups were compared using a generalized linear mixed model approach.

**Results:** The rate of uncovered struts was 10.7% (95% confidence interval (CI): 6.5% – 15.2%) with thin-strut DES (OR 0.38 [95% CI: 0.19 – 0.76], p<0.005) vs. thick-strut DES (ODDS ratio (OR) 0.38 [95% CI: 0.19 – 0.76], p=0.006). No differences in neointimal thickness above the struts were observed between groups (thin-strut DES: 82 ± 42 μm [95% CI: 136 – 300] OR 1:02 [95% CI: 0.99 – 1.06], p=0.23), Figure.

**Conclusion:** As compared to thick-strut DES, thin-strut DES were associated with improved rates of stent strut coverage as assessed by OCT at 6-8 months follow-up. In struts with coverage, there was no difference in neointimal hyperplasia between thin- and thick-strut DES.