**BRACHYTHERAPY FOR IN-STENT RESTENOSIS: OUTCOMES AT 90 DAYS**

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Background: Brachytherapy has been used in the treatment of in-stent restenosis in bare metal stents. However, given the low volume of patients who develop restenosis with drug-eluting stents, its current use is effective only in a limited number of centers. Looking at the outcomes of patients who have received brachytherapy would help shed light on this treatment option.

Methods: A retrospective analysis of all patients undergoing brachytherapy was conducted with IRB approval. Data, including co-morbid conditions and MACE outcomes, was collected at enrollment and at 3 months post-procedure though chart review. Data at 6 months, 9 months, and 12 months post-procedure are currently being collected and will be available in the near future.

Results: From 06/09/11 to 12/01/11, 40 patients received coronary brachytherapy for in-stent restenosis. All patients received beta radiation with an average radiation dose of 20.12 Grays. At 3 months, MACE outcomes were available for 20 patients. There were no deaths or cases of in-stent thrombosis. Only one patient developed a myocardial infarction within 90 days however this was in the setting of medication non-compliance. 1 patient had restenosis at the brachytherapy site. Exercise tolerances and Duke Activity Index Scores improved after brachytherapy as well.

Conclusions: Brachytherapy is safe for the treatment of in-stent restenosis and improves exercise tolerances and quality of life in patients who receive this treatment. Further data is currently being collected to determine the long-term efficacy of brachytherapy and will be available and presented in the near future.