**Percutaneous coronary rotational atherectomy**
**(How to use effectively, How to manage the complication)**

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Percutaneous coronary rotational atherectomy has become a widely used, effective procedure for myocardial revascularization. The use of a high-speed, diamond-coated burr to ablate coronary atherosclerosis has proven effective in treating complex lesions, and potentially may limit restenosis. Our recent idea of the indications for rotational atherectomy includes discrete complex lesions, especially those that are calcified, ostial, long diffuse lesions. High procedure success (> 95%) and low complication rate (< 5%) can be achieved after rotational atherectomy of calcified stenosis. Rotational atherectomy preferentially ablates calcified atheroma, results in a larger and more concentric lumen with fewer dissection in calcified lesion. Treatment of ostial lesions by the Rotablator has been also analyzed in many reports, and been proven it's efficacy in terms of low complication rate (i.e. dissection), and high success rate (> 95%). The rotational atherectomy also has a high success rate in complex, long diffuse lesions. Despite it's use in more B2 and C lesions compared to PTCA, it had high success, lower residual stenosis, fewer ischemic complications and lower restenosis rate. There are several complications, which is particularly characteristic of rotational atherectomy. Those are coronary dissection, perforation, abrupt closure, slow flow (no flow), and severe spasm. Dissection is seen more frequently in tortuous, eccentric and longer lesions and resulted in acute closure (less than 5 %). Perforation is more seen in lesions located on a bend. Management of these two major complications is one of the most important techniques of rotational atherectomy. At this session, we will discuss about it using stents, covered stent, etc, with our cases.