Clinical Case:
A 65-year-old heavy smoker male patient. He is diabetic on insulin, hypertensive and there’s a history of ischemic heart disease (ejection fraction = 30% with a history of coronary stents). He was presented with right lower limb critical ischemia. CT angiography showed total occlusion of external iliac artery (EIA), common femoral artery (CFA), superficial femoral artery (SFA) and popliteal artery (PA). Well-developed profunda femoris artery (PFA) with very good collaterals reconstituting the anterior tibial artery (ATA). The anesthesia team classified the patient as ASA grade 4. So that the open surgery (ilio-profunda bypass) will be risky and the patient preferred the angioplasty option over the more risky open surgery.

Procedures of the Intervention:
Trans brachial was the access. The guide wire (with supportive catheter) failed to pass right (EIA). Percutaneous access of right PFA was done under the roadmap using micropuncture set and 4F sheath was introduced, using 0.018 guide wire (V 18 of Boston Scientific) it could pass through CFA and EIA and re-enter the CIA in retro-grade manner, the track was dilated using a balloon (7mm X 80mm) followed with a stent (7mm X 80mm). There was a satisfactory angiographic result.

Clinical outcome:
There was immediate well felt pulsations of CFA, with good biphasic Doppler signals of ATA which was enough to resolve the critical limb ischemia. It is maintained up to 6 months follow up in-clinic visits.

Aim of reporting such a case:
The art of percutaneous retro-grade access angioplasty is feasible and easy technique which is well known, there is no enough data for using PFA as a retro-grade port to re-vascularize ipsilateral proximal arteries when antegrade measures fail. This case was reported to reflect the importance of using such technique to avoid major operations in high risk patient or as a first step before those major surgeries as it never precludes the surgical option.