Postprocedural shock related to right rectus abdominis hematoma

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73 years-old lady admitted to the neurosurgical department to treat right leg radiating pain related to L3 compression fracture. Her preoperative ECG showed pathologic Q wave in II, III, AVF and mild T wave inversion on V1, V2 and V3 leads. No significant abnormality was existed in echocardiography. Treadmill test was impossible due to leg radiating pain. So, CAG was performed; it showed significant stenosis in large OM1 branch (File.1,2,3). Neuorosurgical procedure was done for her L3 area pathology; radiation pain was relieved significantly. After recovering of surgical wound, PCI was performed. During the CAG, we got some difficulties in transradial approach due to severe bending of her Rt subclavian artery (File.4). We started her PCI with Rt CFA access. Non-hydrophilic metal wire went to Lt CIA repeatedly (File.5). So, I have inserted a 6Fr femoral sheath with Terumo wire. No fluoroscopic examination was done at Terumo wire insertion. PCI was finished smoothly with implantation of Synergy XD 3.0X0 mm with 6Fr Rt CFA access (File.6.). Puncture site was observed with DSA, there was no notable abnormality in distal iliac to proximal SFA (File.7,8,9). Femoseal was applied well. 6 hr after the procedure, patient showed agitation, cold sweating, chet pain, her vital sign was 60/30 mmHg, 123 BPM, her hemoglobin was dropped from 10.6 g/dL to 7.1 g/dL. Rt thigh area was relatively clear, but her Rt flank and lower quadrant area showed painful, soft irregular margined mass. In the enhanced abdominal CT, 17X6X19 cm-sized heterogenous hypodense mass was observed in Rt lateral abdominal wall (File.10,11,12,13). It was rectus abdominis muscle hematoma. We thought that branch vessel of inferior epigastic artery originated from external iliac artery was perforated with Terumo wire during CFA puncture; it made significant hematoma within rectus abdominis muscle and delayed hypovolemic shock. In the CT, there was no notable active bleeding site. Bleeding site might be compressed with hematoma itself. Transfusion and vigorous hydration, patient was recovered, rebleeding was not happened. Access site bleeding is significant and critical complication especially in femoral access. It might be occurred with too high or low puncture, not in proper position of CFA. But, hydrophilic wire related perforation to inferior epigastric artery also can be a potential cause of abdominal wall bleeding and shock. Caution should be made during wiring in the process of CFA puncture, fluoroscopic tracing of wire should be done the puncture process.