

(100%) cases. Mean time to ambulation was 3.4(±2.4) hours. In the antegrade group the primary end points noted in 11 (5%) cases included 5 hematomas >5cm, 2 retroperoneal bleedings, 0 pseudoaneurysms and 4 hospitalizations. Secondary end point was observed after 38 (17%) procedures included 11 hematomas <5cm, 8 adjunctive manual compressions, 19 ecchymosis <20cm. In the retrograde group the primary end points noted in 2 (2%) cases included 1 hematomas >5cm, 0 retroperoneal bleedings, 1 pseudoaneurysms and 0 hospitalizations. Secondary end point was observed after 9 (8%) procedures included 11 hematomas <5cm, 8 adjunctive manual compressions, 19 ecchymosis <20cm. There were no significant differences in the primary and secondary end points between both groups.

**Conclusion:** It appears that there are no significant differences in the complications rate between the antegrade and the retrograde approach. Thus in patients with complex, calcified arteries disease the antegrade stick should be preferred.

#### Disclosures:

Radoslaw Kiesz: This author has nothing to disclose.  
Adam Janas: This author has nothing to disclose.  
Magda Konkolewska: This author has nothing to disclose.  
Radoslaw Szymanski: This author has nothing to disclose.  
Szymon Wiernek: This author has nothing to disclose.  
Micheal Cavazos: This author has nothing to disclose.  
Pawel Buszman: This author has nothing to disclose.

## D-022

### Title: Ambulation Three Versus Six Hours Post Femoral Artery Hemostasis in the Percutaneous Coronary Intervention Patient

#### Category: Vascular Access and Arterial Closure Devices

Authors: Warfield Karen, R.N., C.N.S., M.S.N., Mayo Clinic, United States, Rochester, MN<sup>1</sup>; Tilbury R. Thomas, M.D., Mayo Clinic, United States, Rochester, MN<sup>2</sup>; John Bresnahan, M.D., Mayo Clinic, United States, Rochester, MN<sup>3</sup>; Abhiram Prasad, M.D., Mayo Clinic, United States, Rochester, MN<sup>4</sup>; Ryan Lennon, None, Mayo Clinic, United States, Rochester, MN<sup>5</sup>

**Background:** Prolonged bed rest after femoral artery sheath removal following percutaneous coronary intervention (PCI) is associated with discomfort. The aim of this study was to investigate patient perceived back pain, overall discomfort, and the safety and efficacy of reducing the duration of post PCI bed rest from six to three hours.

**Methods:** 249 patients, including those receiving GP IIb/IIIa inhibitors, undergoing PCI utilizing 5 or 6 French sheaths from the femoral access site were randomized to either three (n = 127) or six hours (n = 122) of bed rest. Perceptions of back pain and over-all discomfort were measured by the McGill Pain Questionnaire – short form (SF-MPQ) and the Visual Analog Scale (VAS).

**Results:** At 3 hours post-hemostasis, 30% of all patients had at least one verbalization of pain since sheath removal and 28% required analgesics, with similar proportions in both treatment groups. Six patients developed a hematoma > 5 cm. From 3 to 6 hours post-hemostasis, 21% of patients verbalized experiencing pain on one or more occasion, and 16% required analgesia. Patient randomized to 6 hours of bed rest experienced significantly more pain: visual analog scale (p = 0.005), the Pain Rating Index (PRI) (p = 0.003) and the Present Pain Index (PPI) (p = 0.015). One patient (randomized to 3 hrs bed rest) had a hematoma at this point. After ambulation a hematoma >5 cm was observed in one patient in each of the two treatment groups (p>0.99). Re-bleeding occurred in 2 (1.6%) of the patients who had 3 hours of bed rest, compared to 1 (0.8%) of the patients with 6 hours bed rest (p>0.99).

**Conclusion:** Bed rest time following PCI via femoral access using 5 or 6 French sheaths can be safely reduced from six to three hours with improvement in patient comfort.

#### Disclosures:

Warfield Karen: This author has nothing to disclose.  
Tilbury R. Thomas: This author has nothing to disclose.  
John Bresnahan: This author has nothing to disclose.  
Abhiram Prasad: This author has nothing to disclose.  
Ryan Lennon: This author has nothing to disclose.

## D-044

### Title: Facilitated Compression of the Radial Artery with the Syvek Patch Allows Early Hemostasis and Preservation of Radial Artery Patency: Preliminary Results of the RAPID Trial

#### Category: Vascular Access and Arterial Closure Devices

Authors: Zoltan Turi, M.D., Cooper University Hospital, United States, Camden, NJ<sup>1</sup>; Brian McEniry, None, M.S., Cooper University Hospital, United States, Camden, NJ<sup>2</sup>; Janah Aji, M.D., Cooper University Hospital, United States, Camden, NJ<sup>3</sup>; iliadis Elias, M.D., Cooper University Hospital, United States, Camden, NJ<sup>4</sup>; Simon Topalian, M.D., Cooper University Hospital, United States, Camden, NJ<sup>5</sup>; Steven Werns, M.D., Cooper University Hospital, United States, Camden, NJ<sup>6</sup>; Hasana O'Neal, P.A., Cooper University Hospital, United States, Camden, NJ<sup>7</sup>

**Background:** With increasing use of the radial approach for diagnostic and interventional cardiac catheterization, the standard of post procedure care has been prolonged compression, typically 2 to 6 hours, using a variety of compression techniques. The literature to date has demonstrated early loss of radial artery patency at 24 hrs in > 10% of patients, and at 30 days in approximately 5%. We hypothesized that facilitated compression using a hemostatic agent, poly-n-acetyl glucosamine (Syvek Patch, Marine Polymer Technologies, Danvers, MA) would allow shorter compression times and in turn better radial artery patency rates.

**Methods:** 50 patients undergoing cardiac catheterization were included in the study. The first 15 patients acted as a roll-in group for device and procedure standardization. The remaining 35 (26 diagnostic and 9 interventional) were randomized to either 10, 30, or 60 minute compression with a compression device plus a Syvek patch (n = 11, 11, and 13 pts respectively). All 50 patients were included in the safety analysis. Plethysmography and oximetry were recorded and a Barbeau classification was determined for both radial and ulnar artery flow at baseline, during compression, immediately after compression release, and 1hr, 4hr, and 1 day post hemostasis depending on the length of patient hospital stay. A 30 day follow-up telephone call was made to assess for any late complications.

**Results:** Hemostasis was successful immediately after the assigned time of compression in 34 of the 35 patients. Immediately after compression release, 31 patients had Barbeau Class A plethysmography, 3 had Class B. Only 1 radial artery was occluded; that patient had a patent radial by 1 hour. The majority of patients (n = 24) were discharged after their 1 hr assessment; at the time of last in hospital assessment, the radial artery was occluded in 3 patients. There were no hematomas or other complications in any of the 50 patients, and 30 day follow-up telephone calls revealed no complaints relegateable to the radial catheterization.

**Conclusion:** Accelerated hemostasis with a poly-n-acetyl glucosamine containing patch allows for very short compression times and high early radial artery patency. A larger randomized trial will be performed to confirm the benefit of ultra-short compression on preservation of radial artery flow.

#### Disclosures:

Zoltan Turi: Marine Polymer Technologies, 2. Research Grants  
Brian McEniry: This author has nothing to disclose.  
Janah Aji: This author has nothing to disclose.  
iliadis Elias: This author has nothing to disclose.  
Simon Topalian: This author has nothing to disclose.