

## **Retroperitoneal Bleeding after Cardiac Catheterization - A Single Center Report**

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**Background:** Retroperitoneal bleeding (RPB) is an unusual but potentially fatal vascular complication occurring after cardiac catheterization (CC). Current data of the predisposing factors and the clinical management of RPB in the era of dual anti-aggregant therapy and vascular closure devices are lacking.

**Methods:** We retrospectively examined all RPB cases that occurred in the catheterization laboratory in Rabin Medical Center between the years 2005-2011.

**Results:** Out of 26,855 patients who underwent CC, a total of 51 patients (mean age  $61 \pm 15$  years, 55% female) with RPB were identified (overall prevalence 0.19%). The etiology for CC was acute coronary syndrome (39%), myocardial infarction (33%), stable angina pectoris (10%), valve surgery (10%) and transcatheter aortic valve implantation (6%). Coronary intervention was performed in 34 patients and closure device was used in 31% of patients. Seventy five percent of the patients were treated with clopidogrel, 20% with IIb/IIIa inhibitors and 16% with anticoagulation. The median time to bleeding differed between patients with and without a closure device (12 hours vs. 5 hours, respectively). Computed tomography was the method of diagnosis in 92% of the patients. The clinical presentation of RPB was hemorrhagic shock in 42% of patients and 45% have received blood transfusion. Patients were managed either by conservative treatment (78%), angiography stenting (17%) and vascular surgery (8%). A total of 2 patients died of which RPB was the etiology in 1 patient (2%).

**Conclusions:** RPB is a rare but serious complication of CC occurring predominantly in female. Time to onset of bleeding can be delayed in patients treated with vascular closure devices. Mortality is not necessarily prevented when treating the bleeding source.