PCI-RELATED BLEEDING RISK BY ACCESS AND NON-ACCESS SITE IN THE NATIONAL CARDIOVASCULAR DATA REGISTRY®

i2 Poster Contributions
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Background: Bleeding related to percutaneous coronary intervention (PCI) occurs at both access and non-access sites. Using a large, nationally-representative PCI database, we compared the frequency of access versus non access bleeding by bleeding risk category.

Methods: Analysis of patients in the National Cardiovascular Data Registry® (NCDR®) CathPCI® registry from 2004-2008. Major bleeding events were classified as occurring at access (vascular entry site or retroperitoneal), non-access site (gastrointestinal, genitourinary, other), or both. Risk of bleeding was calculated using the validated NCDR risk algorithm with patients classified into low (3%) categories. Rates of access, non-access site, and dual site bleeds were determined for each category.

Results: Among 1,522,935 patients undergoing PCI, there were 30,429 (2%) bleeding events that occurred at access site in 16,234 (53%) and non-access site in 14,195 (47%). Among patients with bleeding events, lower bleeding risk was associated with a greater frequency of access site bleeding, while non-access and dual bleeding was more common in high risk patients (Figure).

Conclusions: Approximately one-half of PCI-related bleeding occurs at non-access sites. By estimated bleeding risk, access site bleeding is more frequent in low risk patients while non-access site and dual bleeding is more common in high risk patients. Bleeding mitigation strategies need to address bleeding risk at both sites.