Novel blood thinner found to be safe and effective in women

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Percutaneous coronary intervention (PCI) is a staple of modern day medicine in which cardiologists place a stent in a blood vessel around the heart in order to restore blood flow in people with heart disease. Blood thinners allow for the procedure to be completed with a reduced risk of certain complications such as clots. In 2015, a potent intravenous blood thinner, cangrelor, was FDA approved for this purpose following positive results from a multi-center trial. However, the efficacy and safety of blood thinners in women has not been previously well studied.

In new research, investigators from Brigham and Women's Hospital compared the safety and efficacy of cangrelor to another commonly used anti-platelet therapy, clopidogrel, to see whether the effects differed between men and women. Researchers found that among women, cangrelor reduced the odds of major adverse cardiovascular events by 35 percent and reduced the odds of stent thrombosis (clot in a stent) by 61 percent when compared to standard therapy. The odds of severe bleeding were not increased. Their findings are published in the January 19, 2016 issue of *Circulation*.

"In the past, questions have been raised about the safety and efficacy of blood thinners in women," said lead author Michelle O'Donoghue, MD, MPH, a cardiologist and researcher at Brigham and Women's Hospital. "This study provides important reassurance overall that this potent and novel intravenous blood thinner appears to offer as much benefit for women as it does for men."

The research team used data from the randomized control trial, CHAMPION PHOENIX, which studied cangrelor in more than 11,000 patients who were undergoing elective or urgent stenting.

More information: Michelle L. O'Donoghue et al. The Efficacy and Safety of Cangrelor in Women Versus Men During PCI: Insights From the CHAMPION PHOENIX Trial, *Circulation* (2016). DOI: 10.1161/CIRCULATIONAHA.115.017300

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