

## **USage of Hemcon for Femoral Hemostasis after Percutaneous Procedures - A Comparative Open Label Trial**

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Hemostasis of the femoral artery after percutaneous coronary angiography (PCA) is time consuming and uncomfortable for the patient. The Hemcon pad is routinely used by the US army to control traumatic bleeding. It contains Chitosan, a positively charged carbohydrate that attracts the negatively charged blood cells and platelets and promotes clotting. We aimed to test the efficacy and safety of the Hemcon pad for femoral hemostasis after PCA. Primary (efficacy) endpoint was time to hemostasis. Secondary (safety) endpoint was complication rate.

### **Methods**

Patients undergoing PCA were 1:1 randomized for manual compression with either regular or Hemcon pad. All patients received 2500 u of heparin. Excluded were patients >80 years old, systolic blood pressure >150mmHg, known bleeding tendency; STEMI, or receiving IIB-IIIa antagonists, unfractionated heparin or LMWH within 8 hours before or during the procedure. Time to hemostasis, incidence of minor and major bleeding, hematoma size and post procedural stay at the hospital were compared between the 2 groups. Sixty patients in the Hemcon group and 60 patients in the Control were recruited. Activated clotting time before manual compression was similar in both groups  $182.4 \pm 45.4$  and  $177.8 \pm 34.7$  seconds in the Hemcon and Control group respectively. Time to hemostasis was 5.7 and 8.3 minutes in the Hemcon and control groups, respectively ( $P < 0.001$ ). Hematoma developed in 5% and 16.6% of patients in the Hemcon and Control group, respectively.

### **Conclusion**

The Hemcon pad significantly decreased time-to-hemostasis compared to regular pad. The total incidence of hematoma was also decreased in the Hemcon-pad compared to regular-pad group.