

## **Intra-aortic balloon pump use and outcomes with current therapies.**

Vales L, Kanei Y, Ephrem G, Misra D.

### **Source**

The Heart Institute, Beth Israel Medical Center, 1st Avenue at 16th Street, New York, NY 10003, USA. [lvalesmd@gmail.com](mailto:lvalesmd@gmail.com)

### **Abstract**

#### **OBJECTIVES:**

Our purpose was to describe the contemporary utilization, clinical outcomes and complication rates of intra-aortic balloon pump (IABP) therapy in this current age.

#### **BACKGROUND:**

IABP use and outcomes, in the setting of modern antiplatelet therapy and primary percutaneous coronary intervention and the use of drug-eluting stents as we know them today, have not been clearly established.

#### **METHODS:**

We performed a retrospective cohort study by collecting detailed clinical and device data from all 150 consecutive patients who received IABP therapy in our institution between 2004 and 2009.

#### **RESULTS:**

Thrombocytopenia occurred in 50%, fever in 36%, bleeding in 27%, and vascular embolic events in 1%.

Thrombocytopenia was the most common adverse event and was not significantly associated with the use of antiplatelet agents. The presence of diabetes mellitus, elevated white blood cells at presentation, and longer duration of IABP were significantly associated with the development of fever. Furthermore, those who developed fever had higher in-hospital mortality (31% versus 16%;  $p = 0.0487$ ).

#### **CONCLUSIONS:**

In this contemporary cohort of IABP patients, complication rates of thrombocytopenia, fever and bleeding were relatively high but similar to prior studies, even in this current era of revascularization and antiplatelet medications.