

## **HEPARIN- INDUCED THROMBOCYTOPENIA: COMPLICATING THE HEART SURGERY.**

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**Introduction:** Heparin-induced thrombocytopenia (HIT) is a syndrome of antibody-mediated activation of platelets and coagulation that confers increased risk of thrombosis.

**Objective:** To highlight the problem of heparin induced thrombocytopenia.

**Method:** We report a case of a 64 year old woman who suffered severe heparin-induced thrombocytopenia after heart surgery. She was hospitalised with dyspnoea, syncope and chest pain. She was diagnosed with critical acute aortic stenosis and coronary artery disease. She underwent aortic valve replacement and coronary artery bypass grafting. During surgery complications arose as she got a stone heart like conditions. She was connected to extracorporeal membrane oxygenation (ECMO ) and Intra-aortic balloon pump (IABP) with heparin infusion 600IE/hour. After four days on ECMO circulation, she had severe respiratory distress. Diffuse haematomas, many abnormal coagulation parameters and her platelet count had decreased to  $109 \times 10^9/L$ . She had no mechanical activity in her heart. After nine days she was heart transplanted. ECMO circulation was continuing because of lung failure. Her renal conditions also worsened with high urea concentration. Her platelet count had decreased to  $67 \times 10^9/L$ . HIT was then suspected, so heparin was replaced with refludan and monitored with cepho-test (activated partial thromboplastin time (aPTT): 70-100sec). After 19 days she was still supported with ECMO circulation. She developed a new haematoma, her kidneys failed and continuous veno venous hemodiafiltration was connected to the ECMO circuit. Large amounts of blood products were transfused. Refludan was disconnected because of massive bleeding. Her aPTT count was still 55. Her overall condition worsened and developed multi organ failure. ECMO treatment was terminated after 25 days and she died after short time.

**Conclusion:** We present this complex case to highlight the characteristics of HIT type II. It is a complication of heparin therapy. Early diagnosis and alternative therapy are essential to achieve a successful result.