Abstract

Objectives: The need and timing of perioperative heparin prophylaxis is matter of debate. The aim of our work is to review the incidence of venous thromboembolism (VTE) after radical retro pubic prostatectomy (RRP) in patients undergoing preoperative blood donation, compressive stockings, haemodilution, surgical prevention of lymphocoele and postoperative low molecular weight heparin therapy as prophylaxis for thrombotic events. Methods: This is a retrospective analysis considering a series of 500 RRP performed between 1999 and 2006 by the same Surgeon (MG) at the Urological Unit, Desio Hospital, Milan, Italy. All the patients were enrolled in an auto transfusion program and were subjected to autologous blood donation. Low molecular weight heparin (0.4 ml of Calcic Nadroparin 3800 UI s.c. daily) was administrated within 24 hours following surgery until the 11th post-operative. Age, PSA, basal, preoperative and postoperative haemoglobin values were assessed in each patient. The incidence of venous thromboembolism was calculated taking into consideration occurrences of both pulmonary embolism and deep venous thrombosis. Results: In this retrospective analysis we did not observe any major event including intra-or peri-operative deaths. There was one occurrence of pulmonary microembolism and one sural phlebitis that were treated with prolonged heparin and dicumarol therapy. Two significant haemorrhagic events occurred in the postoperative period requiring surgical revision. Conclusions: These data suggest that low weight heparin prophylaxis starting within 24 hours following radical prostatectomy, associated with preoperative blood donation, intra-operative haemodilution, compression stockings, surgical care to avoid lymphocoele and early mobilization is effective in preventing venous thromboembolism.

Keywords

Radical prostatectomy, Heparin, Bleeding, Venous thromboembolism.