PP108 THREE-FACTOR PROTHROMBIN COMPLEX CONCENTRATE: HOSPITAL KUALA LUMPUR EXPERIENCE

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INTRODUCTION

Three – factor Prothrombin Complex Concentrate (3f-PCC) is routinely used in Hospital Kuala Lumpur to reverse the anticoagulatory effects of warfarin. The 3f-PCC contains factors II, IX, X and low levels of factor VII that reverses elevated International Normalized Ratio (INR) within 15 minutes. A weight-based dosing of 3f-PCC was adapted from Australasian Society of Thrombosis and Hemostasis (ASTH) 2013 guideline. Designated physicians and pharmacists monitored all reported cases to assess rationale, efficacy and safety of 3f-PCC.

CASE SERIES

A clinical case series describing ten patients on warfarin therapy requiring anticoagulatory effects reversal with 3f-PCC from September 2017 until April 2018. Majority of the cases involved elderly men with underlying atrial fibrillation and a total weekly warfarin dose of more than 10mg. Eight out of ten patients received 3f-PCC post 24 hours of warfarin dose. The indication requiring 3f-PCC is due to bleeding in eight patients, two dues to emergent procedure and the remaining for high INR. Almost all cases were dosed as per protocol (ranging from 25IU/kg – 50IU/kg). All patients had reduction in INR except for one case which may be due to disease complications. Five of the patients successfully achieved intended target range. None of the patients experienced an anaphylactic reaction or thromboembolic event. A relatively satisfactory hemostatic response was obtained in at least nine patients although two patients passed away due to multiple organ failure.

DISCUSSION AND CONCLUSION

In our setting, 3f-PCC was able to reverse warfarin anticoagulatory effects without serious complications. Weight-based protocol did result in INR reduction in these patients but not to the intended target range, which may be influenced by the accuracy in weight estimation, time of INR sampling post 3f-PCC transfusion and supportive therapy use. More data is required to evaluate the use of weight-based dosing of 3f-PCC in Malaysian population.