Low cost locally prepared fibrin glue for clinical applications: reported of 145 cases. Committee of Bangkok International Hemophilia Training Center.

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Abstract:

Fibrin glue (FG) is one of the blood products known to be very useful for local hemostatic measure and as a medically valuable tool for adhesion, sealing, anastomosis, repair microvascular and nerve grafts in medical and surgical procedures. Before 1996, FG was used to a limited extent in Thailand due to the high cost. Technology for locally prepared FG was transferred to Bangkok International Hemophilia Training Center of the World Federation of Hemophilia (IHTC-WFH) in July 1996 by Prof. Uri Martinowitz and the late Prof. Henri Horoszowski. Since then FG has been widely used and proved to be very useful in Thailand. This paper reports 145 cases using low cost locally prepared FG at Ramathibodi Hospital during November 1996 to December 1997. A total of 145 cases with age range from 5 months to 73 years, which included 55 pediatrics and 90 adults, 100 males and 45 females. The amount of FG used was 1-80 ml per case. Clinical procedures included dental surgery (46), open heart surgery (35), ENT (28), orthopedic (13) including 2-3 joint correction in one session in 2 hemophiliacs, neurology (11), plastic repair (7), liver (2) and severe bleeding in dengue hemorrhagic fever (3). Forty-seven cases had hemostatic disorders. The result of local hemostatic, adhesive and sealant effect of FG was satisfactory with no complications. In open heart surgery, the amount of content in chest drain decreased and none required reopen-surgery to stop bleeding. Dental surgery was performed in 43 patients with bleeding disorders i.e. hemophilia, idiopathic thrombocytopenic purpura, leukemia, severe thrombocytopenia, patients on anticoagulant, etc. Only

3 cases (7%) required blood component compared to all of the 50 no-FG controlled cases (100%) that required blood component therapy. FG has proved to be very useful in many aspects i.e. minimizing blood product usage, decreasing medical workload, reducing medical cost and increasing patients' convenience and satisfaction in particular.