



DENTAL MANAGEMENT OF CHILDREN WITH BLEEDING DISORDERS THE KUALA LUMPUR HOSPITAL EXPERIENCE



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Introduction

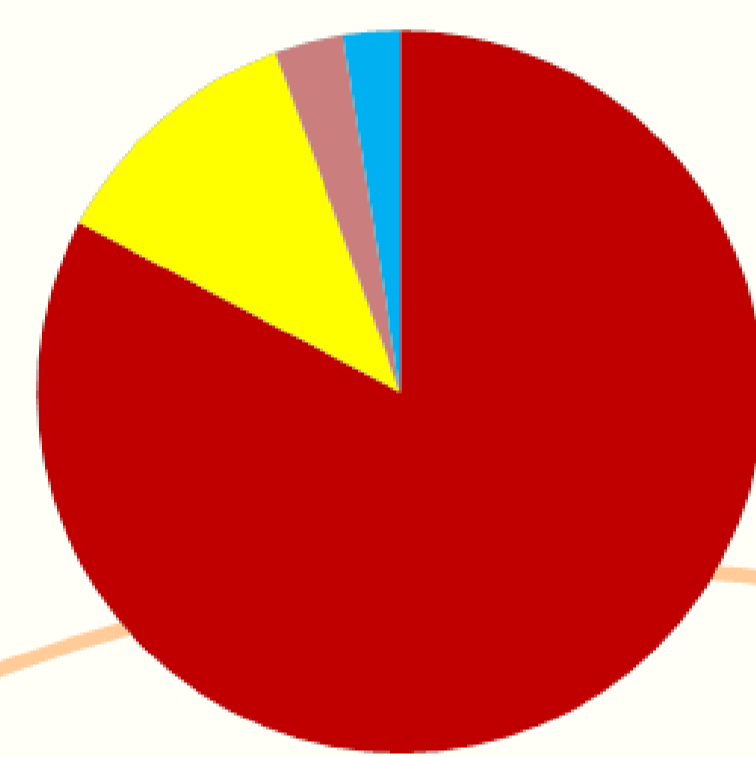
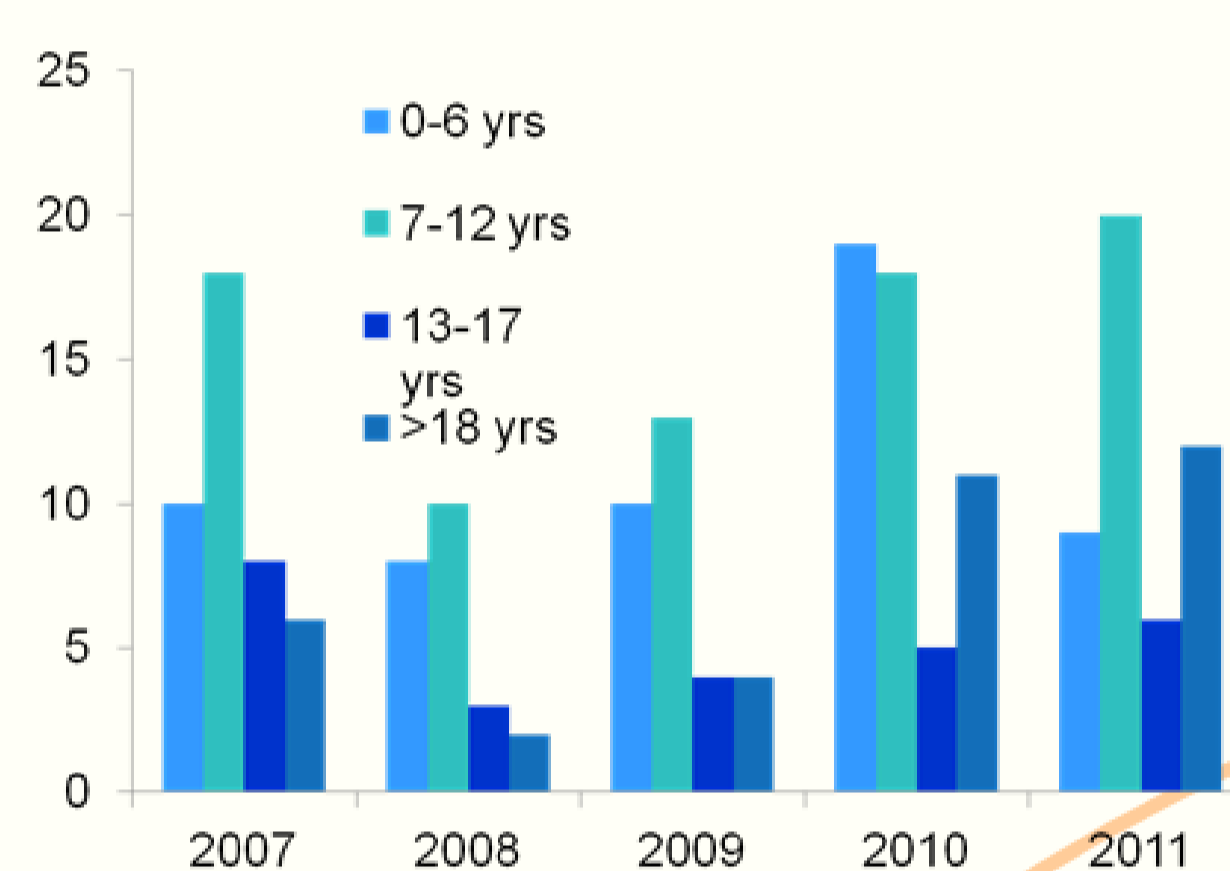
Children with bleeding disorders merit special consideration because if poorly managed, the affliction can be disabling with sometimes devastating consequences. These children may be at risk from infection due to their condition or resulting from poor management, with the attendant risk of prolonged bleeding and developing antibodies to the factors used to manage their condition. Bleeding following tooth extractions may be potentially life-threatening if not managed properly^{1,2}.

Objectives

The three most common bleeding disorders in Malaysian children are the haemophilia A, haemophilia B and the von Willebrand Disease with the incidence of 1:10,000, 1:50,000 and 1:8000 respectively. However, the National Registry only show records of 968, 179 and 450 individuals afflicted with these conditions respectively. This paper will present the interdisciplinary management of children with bleeding disorders referred to the dental clinic of the Paediatric Institute Kuala Lumpur Hospital.

Method

Cases seen were patients referred by various health practitioners. Since the formation in 1998 of a multidisciplinary team comprising dentists, haematologists, physiotherapists and orthopaedic surgeons to manage patients with bleeding problems particularly haemophilia and von Willebrand disease, the department had rendered comprehensive dental treatment to patients who were registered with the National Blood Centre. This included promotive, preventive, curative and rehabilitative aspects of oral healthcare. Initially, the patients seen attended with poor oral hygiene and untreated diseases. Apart from the two common dental diseases namely caries and gingivitis, other oral lesions managed were pseudotumours of the orofacial region and dentigerous cyst. Besides providing treatment to the patients as and when necessary, other activities carried out were oral health education and toothbrush drill, as well as seminars and workshops for minders and healthcare providers. A guideline on comprehensive management of patients with bleeding disorders was also developed and distributed to all public healthcare facilities in the country. A retrospective study was carried out to determine the patterns of attendance by patients with bleeding disorders for the last 5 years. Distribution according to patients' age is shown Table I, the types of bleeding disorders is shown in Table II. The treatment rendered to these children included extractions, restorations, provision of partial dentures and soft splints, and enucleation of cyst and pseudotumours, as shown in the clinical photographs below. Local haemostatic measures as well as specific coagulation factor, antifibrinolytic agents and antibiotics were prescribed as necessary after consultation with the haematologists for each patient.



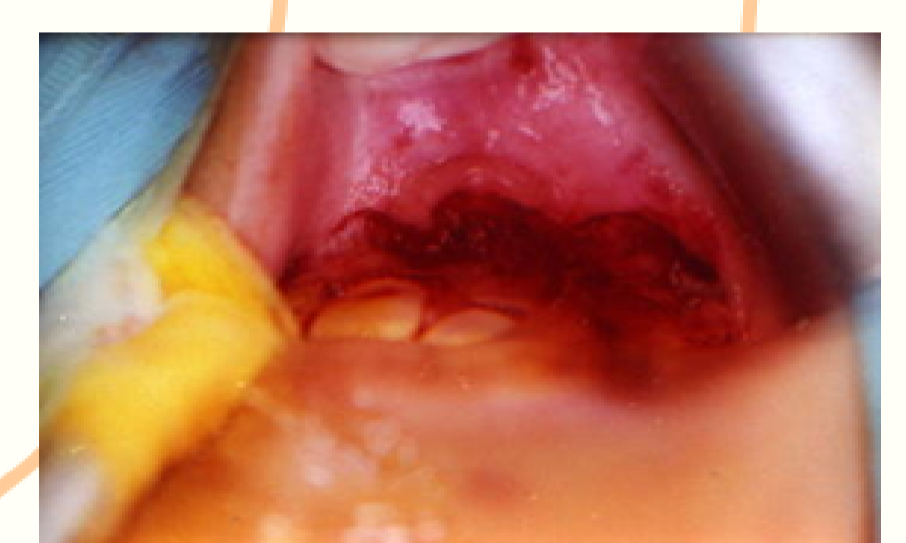
Discussion with parents & patients



Soft splint to arrest bleeding after tooth exfoliation



Immediate denture after multiple extractions



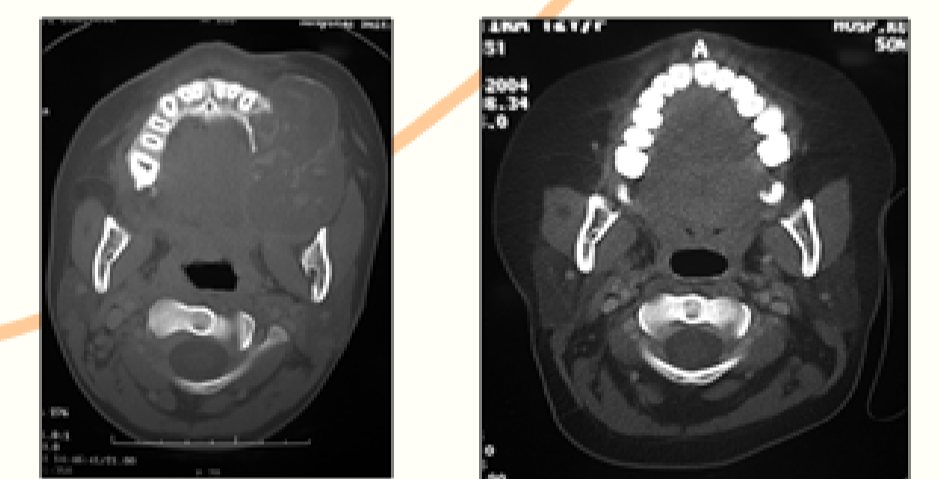
Cyst evacuation in haemophilia A



Training of Healthcare personnel



Evacuation of Pseudotumour in vW Type 3



Enucleation of Pseudotumour in ITP

Discussion

Dental management of patients with bleeding disorders requires an understanding of the normal hemostatic system and the patient's specific coagulation defect. Appropriate preoperative planning and evaluation with the patient's physician or hematologist is necessary so that quality comprehensive dental care can be provided. Although appropriate replacement therapy, a selection of treatment approaches and local haemostatic measures are readily available, emphasis should be placed on optimizing regular promotive and preventive advice and follow-ups to prevent dental diseases and invasive dental treatment requiring factor replacement^{3,4}. For our patients, the biannual camps, during which they undergo medical, orthopaedic, haematologic and dental assessment, as well as performing muscle strengthening exercises and participating in workshops, have proved to be beneficial in improving their general health including oral health status. Concurrent training for healthcare workers and the development of a management guideline help ensure optimum management for these patients. In addition, audits on the effectiveness of the programme is desirable to ensure appropriate and quality patient care^{5,6}. Training workshops for healthcare personnel managing these patients are also important to familiarise them with the conditions and treatment strategies, as well as to enhance their understanding of the diseases.

Conclusions

Multidisciplinary management of patients with bleeding disorders is important so that appropriate treatment resulting in good function and aesthetics is achieved, boosting the patients' morale and self-esteem that subsequently improve the patient's quality of life. With appropriate management strategies, nearly all bleeding disorder patients can benefit from the full range of dental procedures available to establish and maintain good oral health.

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