

Prevention of dental injuries and management of first-aid procedures in Hemophilia A (HA) children: experience of a single center

De Padua V, Gaglioti D, Bosco R, Riva F, Baldacci E, De Angelis F, Mazzucconi MG, Santoro C.

Department of Oral Surgery, George Eastman Hospital, Rome.

Hemathology, Department of Cellular Biotechnology and Hematology, Sapienza University of Rome.

BACKGROUND

Dental trauma is one of the most common dental problems for 1-17 year old children, especially because of their attitude to play and sport practicing. Children with maxillary protrusion have higher risk of dental injuries. Such risk becomes a most worrying emergency in hemophilic patients.

AIMS

1. to detect II class malocclusion with maxillary protrusion in hemophilic children;
2. to perform an effective educational campaign about dental care for children parents.

PATIENTS AND METHODS

- 20 patients affected by HA: 16 severe, 3 moderate, 1 mild.
- Median age: 8 years (range 3-16);
- Period of observation: 1 year;

During children fist exam, we evaluated II class malocclusion and behaviours at risk for skeletal and dental problems (thumb and pacifier sucking).

A questionnaire to assess children attitudes and to explore parents knowledge about first-aid procedures in case of dental trauma was administered.

The Hemophilia Center informed the parents about replacement prophylactic therapy to be administered to their children in case of trauma, on the basis of coagulopathy type/severity.



Face profile of II class malocclusion



Maxillary protrusion with increased overjet



Deep-bite



Dental caries

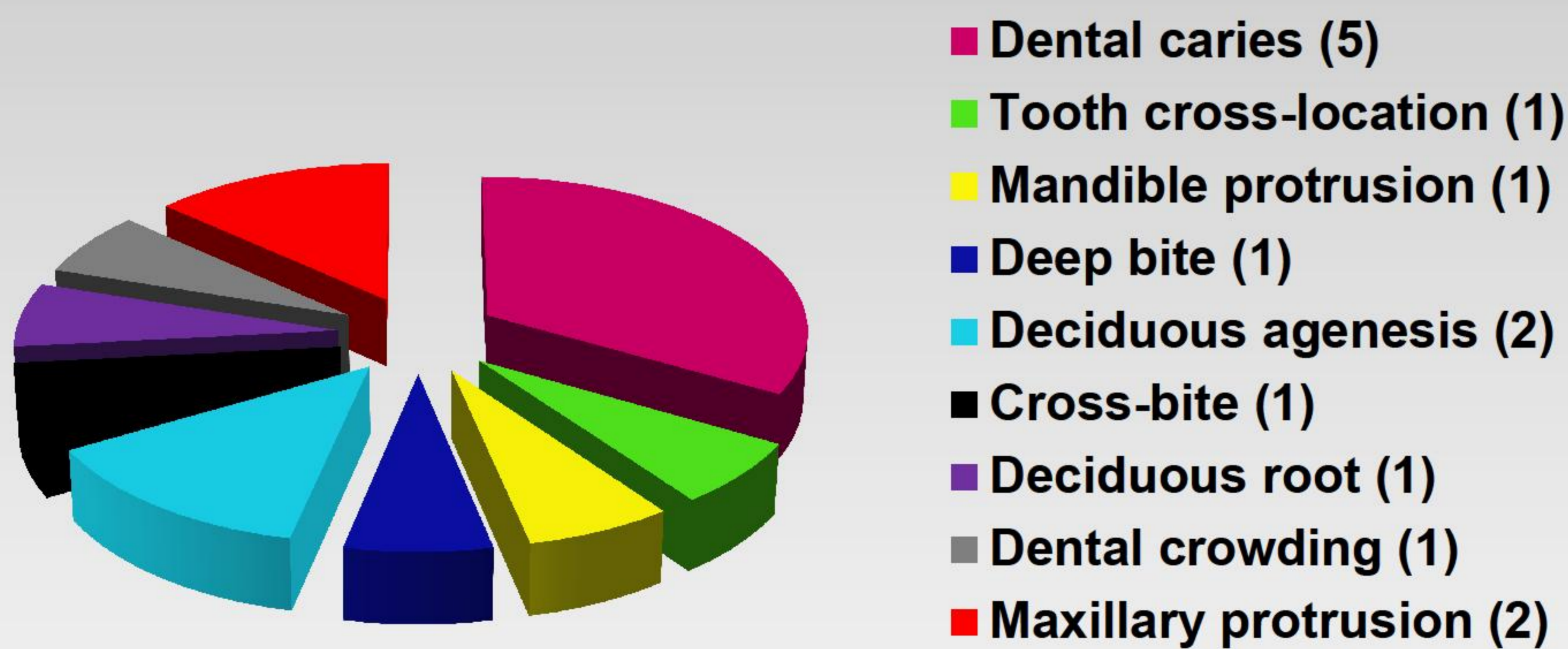


Dental crowding



Tooth cross-location

RESULTS



7 patients were referred to the Orthodontic Department for correction treatment.

2 patients were referred to the Conservative Department for restorative treatment.

1 child has undergone 1 deciduous root extraction during his prophylactic therapy day, ensuring local hemostasis with gelatine packing, fibrin glue, absorbable suture, 15-minute compression with tranexamic acid saturated gauze.

Parents of 7/20 patients were sufficiently informed about the risk of thumb and pacifier sucking for the development of maxillary protrusion, while parents of 13/20 were informed about first-aid procedures in case of dental injuries.

A brief lecture on first-aid in case of dental trauma was given by the dentist and the hematologist.

CONCLUSIONS

Early identification of maxillary protrusion and consciousness of sports connected risks can prevent functional dental defects and reduces the risk of dental trauma. This is particularly important for hemophilic patients because of the hemorrhagic complications.

A close collaboration between the Dental and the Hematology Department results in a better outcome of dental problems in hemophilic patients.

- Broderick CR, Herbert RD, Latimer J, Barnes C, Curtin JA, Mathieu E, Monagle P, Brown SA (2012) Association between physical activity and risk of bleeding in children with hemophilia JAMA (2012) Oct 10; 308(14): 1452-9.

