

When treated at a very early stage, the outcome is most satisfying. No recurrence, scar or functional impairment was observed. When acted on in a very advanced state of growth, the anatomy of the eyelid was seen to be harmed, function and aesthetics compromised and intraorbital advancement caused a displacement of the eye. Laser treatment aims at an inhibition of progression and reduction of volume. Systemic cortisone can decrease the growth rate.

**Conclusion:** Hemangiomas in the periorbital region should be classified as an urgency and treated in the earliest stage. Laser treatment in that stage is effective and causes little side effects.

#### O.238 Our experience with the treatment of lymphatic malformations of the head and neck

D. Dovsak, A. Vesnaver, A. Eberlinc, T. Dovsak. *Department of Oral & Maxillofacial Surgery, University Medical Center Ljubljana, Slovenia*

**Introduction and Objectives:** Lymphatic malformations in the maxillofacial region are usually congenital. Small lesions in the oral cavity frequently occur in association with venous malformations. Lymphatic malformations can be large and life threatening. There are different treatment options and several factors affecting the choice of treatment.

**Material and Methods:** In the past 3 years six children and four teenagers with lymphatic malformations in the head and neck region were referred to our department. Two children with large lesions in the neck were treated with OK-432, one successfully with two injections and one with surgery afterwards. Four teenagers with lesions in the oral cavity were treated with the Nd-Yag laser. Two children with lesions in the neck were operated and the others are still under observation.

**Results:** One child treated only with OK-432 has had no recurrence three years after the second injection. Two children with large lesions in the neck were operated (one child receiving OK-432 prior to surgery) and have had no recurrence but have some functional problems due to the operation. All patients with smaller lesions in the oral cavity were successfully treated with the laser. Three children are still under observation.

**Conclusions:** Results depend on the type and extent of the lesions, choice and time of treatment. Small lesions of the mucosa can be successfully treated with laser, large lesions can be treated with OK-432 or need to be removed by surgery. In order to remove the lesions completely, some functional structures in the neck must sometimes be sacrificed.

#### O.239 Validity of the Demirjian's method in determination of dental age of children of Mazovia, central Poland

I. Rozylo-Kalinowska<sup>1</sup>, E. Kiworkowa-Raczowska<sup>2</sup>, T.K. Rozylo<sup>1</sup>. <sup>1</sup>2nd Department of Medical Radiology, Medical University of Lublin, Poland; <sup>2</sup>Department of Dental and Maxillofacial Radiology, Medical University of Lublin, Poland

Precise evaluation of dental age is an integral part of treatment in craniomaxillofacial surgery of paediatric patients. Demirjian's method basing on calcification of 7 left mandibular teeth on panoramic radiograms is widely used for this purpose. So far Polish authors have not dealt with that issue. Therefore the aim of the study was to determine whether the Demirjian's standards can be used to evaluate dental age in population of Polish children. The material consisted of 994 panoramic radiograms of 584 girls and 410 boys aged from 6 to 16 from the Mazovia region (Poland), divided into 10 yearly groups. Dental age was calculated using the Demirjian method. The results were analysed

statistically using paired *t*-test, *F*-test and linear regression and correlation analysis.

Dental ages evaluated according to Demirjian were significantly accelerated in the analysed group (81.68% of girls; 77.56% of boys) and affected in particular girls aged 11 and 12, as well as 13-year-old boys. No statistically significant differences were observed between girls and boys in yearly groups. Using a non-linear regression model there were established function formulas allowing modification of the Demirjian standard to make it useful in the studied population. Afterwards chronological ages were again compared with dental ages; acceleration was seen in 55.82% of girls and 50.24% of boys, which might come from a positive secular trend in the population reported by many authors. In conclusion, development standards used by Demirjian are not suitable in the studied population; therefore it is necessary to establish new population-specific maturity curves.

#### O.240 The use of biodegradable plates in oral and maxillofacial surgery in children

I. Iatrou, N. Theologie-Lygidakis, F. Tzerbos, K. Alexandridis. *University Department of OMFS, Children's Hospital, Dental School of Athens, Greece*

**Introduction and Objectives:** Clinical studies on biodegradable plates in children have been very few until now (Eppley 1997, 2000, 2005; Eppley et al., 1997; Kurpad et al., 2000; Yerit et al., 2005). Aim of the present study was to present our experience with biodegradable osteosynthesis plates, used in children and to discuss their efficacy and relevant parameters of importance.

**Material and Method:** Twelve children aged 6 months to 14 years, treated for 12 months (from February 2005) were included in the study. More specifically the cases were 7 mandibular fractures (symphysis and body), 2 fractures of the zygomatic complex, 1 case of craniosynostosis, 1 case of hemifacial microsomia and 1 case of antral window. Fixation of fractures and osteotomies was achieved with 17 biodegradable osteosynthesis plates composed of polylactide chains (Inion Ltd, Tampere, Finland).

**Results:** Post-surgical period was uneventful in all cases. Mean follow-up time was 8 months. Fractured bone stability and healing were achieved without any major local reaction or impairment of skeletal growing of the young patients.

**Conclusions:** The use of biodegradable osteosynthesis plates and screws in children had good results in our cases. Young patients avoided a second operation for removal of the plates (as with titanium plates). However, follow-up is required though, for possible late problems. Clinical research would help registering indications for the use of these plates according to their properties.

#### O.241 Management and treatment of paediatric facial fractures: Our experience in a series of 320 fractures

I. Arribas, A. Romance, I. Garcia-Recuero, R. Salvan. *Departamento Cirugia Oral y Maxilofacial, Hospital 12 de Octubre de Madrid, Spain*

**Introduction and Objectives:** Trauma is one of the main causes of morbidity and mortality in the paediatric age group. An important part of these causes are related to craniofacial fractures. There is great disparity in the available epidemiologic data and little consensus about the management in the scant literature on this important subject.

Our objectives are to establish the general principles and methods in the initial management, diagnosis and treatment of facial