

## CARIOUS EXPERIENCE IN INSTITUTIONALIZED CHILDREN

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**Purpose:** This paper aims at assessing dental caries indicators and dental treatment needs in institutionalized children.

**Material and methods:** The clinical material of this paper is the investigation data of 203 institutionalized children. Group 1 represented 82 children aged 7-17 years with varying degrees of mental retardation institutionalized in auxiliary schools. The control group was formed of 121 healthy children institutionalized in boarding schools. Dental status was assessed against WHO criteria. Carious experience was evaluated by estimating the prevalence index (PI) of dental caries, dmft and DMFT indices.

**Results and discussions:** Prevalence index of dental caries falls within 83.24 to 93.45%, and the intensity of caries varies from 3.98 to 5.17 for the COA index.

The study found high dental caries indicators estimated in institutionalized children, especially children with mental retardation; it is obvious the need for minimal invasive treatment methods and the establishment of preventive programs that will help reduce damage by dental decay.

**Conclusions:** Improving dental care for institutionalized children under current conditions in Moldova should be designed by targeting the prevention of major dental periodontal disorders.

## PRACTICAL IMPLEMENTATION OF 3D CBCT TOMOGRAPHY IN DENTISTRY, DIAGNOSTICS OF THE AFFECTS OF MAXILLOFACIAL AREA AND ENT-ORGANS

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**Objective:** To determine the peculiarities of CBCT tomography implementation in dentistry, diagnostics of the affects of maxillofacial and ENT-organs, to formulate a contraindication and indication for the method of examination, to reveal the advantages and disadvantages of the method and to introduce the advanced algorithms of radiology to dentists, oral surgeons and otolaryngologists.

**Materials and Methods:** The report presents the experience of the network of offices of CBCT tomography (Kiev, Kharkov, Odessa, Donetsk), the archives of 2008 through 2011 were involved into the research; the patients from Surgical Rehabilitation Department of the Institute of Dental Sciences of the Academy of Medical Sciences of Ukraine in Odessa, Plastic Surgery Clinic "Virtus" in Odessa, Clinic of Maxillofacial Surgery of Military Medical Clinical Center of the Southern Region of Odessa were involved. The surveys were carried out on CBCT tomographs manufactured by "Vatech". The main methods were CBCT tomography of the two jaws relation, midface, nose sinuses and temporal bone. Most studies were performed before and after surgical and conservative treatment, patient age ranged from 3 to 86 years old. The most common pathologies were traumas, inflammatory processes, cysts, debride, congenital malformations, secondary edentia

**Results and Conclusions:** during the examination we managed to obtain high quality images of hard tissue, to determine the localization of pathological formations of bone fractures, the location of cysts of the jaws and nose sinuses, nasal polyps, to determine the presence or absence of maxillary antrum in-

flammatory process, as well as its origin (odontogenic sinusitis). High resolution and high-quality three-dimensional reconstructions allowed optimal defining and planning the scope and method of surgery in the short term, planning the most successful surgical treatment, determining the anatomical features of the channel, selecting the successful scheme of conservative therapy. The surveys that have been carried out in dynamics, helped to evaluate the cosmetic and functional results of reconstructive and plastic surgery, prevented the occurrence of complications, determined the effectiveness of conservative therapy. Based on these data, the peculiarities of the implementation of CDCT tomography in dentistry and diagnosing the affects of maxillofacial area, ENT – organs, have been determined, the contraindications and indications for the method of the survey have been formulated; the advantages and disadvantages have been revealed; the advanced algorithms of radiology have been introduced to dentists, oral surgeons and otolaryngologists.