

7-3-2020

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### Recommended Citation

Taylakova, D. I. and Kambarova, Sh. A. (2020) "ANALYSIS OF MEDICAL ANAMNESIS DATA AND SECONDARY PREVENTION OF SYSTEMIC HYPOPLASIA OF DENTAL HARD TISSUES IN CHILDREN," *Central Asian Journal of Medicine*: Vol. 2020 : Iss. 2 , Article 7.  
Available at: <https://uzjournals.edu.uz/tma/vol2020/iss2/7>

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## ANALYSIS OF MEDICAL ANAMNESIS DATA AND SECONDARY PREVENTION OF SYSTEMIC HYPOPLASIA OF DENTAL HARD TISSUES IN CHILDREN

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### ABSTRACT

**Research urgency.** Now the problem of dental diseases at children [3] is actual. Many works of domestic and foreign authors are devoted caries and its complications, diseases of periodontitis, to methods of their treatment and preventive maintenance. However, not enough attention is given to such problem as non-cariou defeats; in particular, hypoplasia to enamel that directly is connected with health of children and their psycho-emotional status.

**Research objective.** On bodies of an oral cavity of the working, the considerable quantity of researches both domestic is devoted questions of influence of adverse factors of the industrial environment, and foreign authors [1] that have opened some parties' pathogenesis professional defeats of an oral cavity and were develop by corresponding treatment-and-prophylactic actions.

**Materials and methods.** Children with disease system hypoplasia of teeth hard tissues, at the age from 7 till 15 years of three areas of Bukhara area (Karaulbazar's area-basic group, Gizhduvan's area-comparative group, Settlement of Madaniyat of Bukhara area-control group became object of our research.

**Results.** The analysis of the data of clinical survey has shown that on prevalence of forms hypoplasia enamels from children of 7-12 years in the lead position are occupied with the spotty form (85,3%), erosive form (11%) and mixed (2%) met in single instances, furrowed hypoplasia was not observed. The spotty form (80%) occupies from children of 13-15 years in the lead position, furrowed also forms (11, 4%), mixed (7,7%) are slightly rarer erosive (3%).

**Keywords:** system hypoplasia of dental hard tissues, children, secondary preventive maintenance, complications.

### INTRODUCTION

As to the concrete literary data about development and a condition dentition of children in the conditions influence on them ecologically adverse factors of environment they are not numerous and ambiguous. Toxic chemicals in environment can have negative effects on the organism of children, even in

antenatal period of the fetus, if the mothers has contact during pregnancy or live in a zone of intensive environmental contamination by toxic substances and in postnatal period - through mother's breast milk environmental objects (atmospheric air, potable water, plants and foodstuff), contaminated toxic substances [2].

Now the problem of dental diseases at children [3] is actual. Many works of domestic and foreign authors are devoted caries and its complications, periodontitis, to methods of their treatment and preventive maintenance. However, not enough attention is paid to such problem as non-carious defeats; in particular, hypoplasia to enamel that directly is connected with health of children and their psycho-emotional status. It is known that process of formation of enamel proceeds in three stages: a stage of secretion and a primary mineralization of enamel, a stage of maturing of enamel, a stage of a definitive mineralization of enamel [4]. First two stages pass in prenatal period, the third - in postnatal period. Influence of the negative factor can lead to infringement of any stage of a mineralization that, in turn conducts to occurrence of infringement of development of structure of tooth [5].

Patrikeev V. K (1968) considers that at hypoplasia enamels are broken not only mineralization processes, but also creation of a protein matrix of enamel of tooth because of insufficient or slow function enameloblasts [6].

Sarnat B.J. and SchourI. (1941) found out, that two thirds of hypoplastic defects of rudiments of teeth develop in the period from a birth until first year of life of the child. Approximately, in one third of cases hypoplasia, were discovering on the teeth formed in the early childhood (13 - 34 m). Less than 2 % of defects of enamel developed in the late childhood (35-80 m) . In the period of temporal teeth and in first half of replaceable bite.

G.V.Ovrutsky (1991) supposes that hypoplasia - one of most often-meeting non-carious defeats developing during the period of formation of enamel.

Hypoplasia enamels regarded as a malformation resulting from a violation of metabolic processes in the developing teeth and show in the quantitative,

qualitative violation of enamel. According to scientists, hypoplasia solid dental hard tissues results from violation as enamel formation enameloblasts and easing of process of a mineralization of enamel prisms [7]. Nevertheless, there are operations about correlation of origin diseases of teeth with various level of child's health. Children with the weakened health, especially after antibiotic therapy protective forces of an organism decrease, their immune status changes. It is known that at children living in cities and unfavorable factors submitted to influence of the environment, factors of nonspecific protection of an organism lowered, indexes of physical development changed, the high level of somatic disease revealed more. At children with chronic somatic diseases, processes of solid fabrics formation of teeth are broken.

Generalizing data review of the literature concerning environmental contamination by agricultural and industrial toxic substances and their influences on an organism of the children's population living in regions of intensive pollution of the ecological environment, it is possible to state that:

In Republic Uzbekistan countryside, especially in cotton-growing regions with high level of application of pesticides, pollution of objects of environment (atmospheric air, soil, water and reservoirs, plants, foodstuff) these toxic substances takes place. In separate cotton-growing regions of republic, for example, in Karaulbazar region of Bukhara area, combined pollution of an external environment by pesticides and industrial wastes - the bursts of Bukhara oil refining factory containing a significant amount aromatic hydrocarbon is marked.

As the above-stated pollutants of environment are toxic for a human body and warm-blooded animals, in regions of their intensive pollution the magnification of the general disease, lag in physical intellectual development, lowering immunological reactivity of an organism and magnification of cases of congenital developmental anomalies of children, as most vulnerable and sensitive layer of violence.

Pesticides and other industrial toxic substances make certain negative impact on a dentition of children, leads to magnification of level of some dental diseases.

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In the conditions of the Central Asian region, in particular in Bukhara area, a question on influence of pesticides, anthropogenic environmental contamination by aromatic hydrocarbons in a complex with pesticides and other industrial toxic substances (Sulphur and nitrogen dioxides, ammonia, carbon monoxide and a dust) on development and a dental health of the children's population it is not studied. Some researches, concerning influences of separate pesticides and atmospheric pollutants on organs of an oral cavity of children and led in zones with a temperate climate, have preferentially descriptive character and do not reveal pathogenesis of development pathological changes in an oral cavity.

There is data about comparative learning of a dental health of the children's population living in regions with a different level of environmental contamination, taking into account others premorbid no terrain factors.

There is a need to study the features of clinic and course of dental hypoplasia at children, due to adverse effect of pesticides in the condition of Bukhara area, for the purpose of development organizational and treatment-and-prophylactic actions complex directed on improving quality of environment, lowering and the warning dental hypoplasia among the children's population living in ecologically unsuccessful regions.

**The purpose of the study** is to determine the pathogenesis of occupational lesions of the oral cavity and develop appropriate treatment and preventive measures.

## **MATERIAL AND METHODS**

For the last 9 years, there was an impairment of an ecological portrait. It connected, with magnification number of industrial centers. Impairment of ecological conditions inevitably reflected on health of people. In connection with different frequency of occurrence system hypoplasia at children at the age 7 -15 years two groups have been generated. The first group of Karaulbazar region is 100 children included  $n=48$ ,  $48\pm 5$  children with a replaceable bite at the age 7-12 years, Gizhduvan region is 96 children  $n=31$ ,  $32$ ,  $29\pm 4$ , 77 settlement of Madaniyat

of Bukhara region from 100,  $n=30$ ,  $30\pm 4,58$ . In the second Karaulbazar region from 100 children  $n=16$ ,  $16\pm 3,67$ , Gizhduvan region  $n=19$ ,  $19,79\pm 4,07$ . Settlement of Madaniyat of Bukhara region a constant bite from 13 until 15 years did not meet. It appeared that system hypoplasia enamels meets in 3 times more often at children of 7-12 years - of 48%, than at the age of 13-15 years - 16% in Karaulbazar, Gizhduvan 32% at children of 7-12 years, 19,8% at the age of 13-15 years, these are 1,5 times more often and Bukhara (Settlement of Madaniyat) of 30% at children of 7-12 years.

Total was examined 296 children of them aged 13-15 years of 22 children, at the age of 7-12 years of 78 children of Karaulbazar region, Gizhduvan region at the age of 13-15 years of 41 children, at the age of 7-12 years of 55 children, Settlement of Madaniyat of Bukhara region at the age of 13-15 years of 27 children, at the age of 7-12 years of 73 children have been inspected. System hypoplasia enamels of a second teeth it is found out at 144 (48,6%) children. From them at the age of 13-15 years at 35 persons (24,3%), and at the age of 7-12 years at 109 persons (75,7%). It is necessary to mark that children of both age groups, which parents did not live in three regions of Bukhara area till a birth of the child, have not been included in research.

Data analysis of clinical survey showed that on prevalence of forms system hypoplasia of teeth from children of 7-12 years in the lead position is occupied with the spotty form (85,3%), erosive form (11%) and mixed (2%) met in single instances, furrowed hypoplasia was not watched.

The spotty form (80%) occupies from children of 13-15 years in the lead position, furrowed also forms (11,4%), mixed (7,7%) are slightly rarer erosive (3%).

Most often at children of both age groups were watched a feeble and moderate level system hypoplasia, i.e. the spotty form, the heavy level was watched in single instances. On clinical displays at children in the period of a replaceable and constant bite of 7-12 years, the first place occupied with the spotty form. In Karaulbazar region the spotty form met at (91,7%,  $n=64$ ) children, it on

(18,3%) are more than Settlement of Madaniyat of Bukhara region (73,3%, n=30) and on (5%) Gizhduvan region (87%, n=30). Erosive form (7%) are more in Settlement of Madaniyat of Bukhara region (20%, n=30) than in Gizhduvan region (13%, n=31) and on (11,7%) more than Karaulbazar region (8,3%, n=48) the mixed form watched in a single instance in Settlement of Madaniyat of Bukhara region (6,7%, n=30) and the furrowed form was not watched in one of regions of the given age group.

The spotty form occupies from children of 13-15 years of Karaulbazar region a leading place (81,2%, n=16), it on 2,2% more Gizhduvan (79%, n=19), in Settlement of Madaniyat of Bukhara region at children during survey have not been revealed forms of diseases system hypoplasia of teeth in the given age group, miss an index of erosive forms hypoplasia in Karaulbazar region, and in Gizhduvan region an index of the given form (5,2%, n=31). The index of the mixed form in Karaulbazar region (6,25%, n=16), it on (1%) is more than index of Gizhduvan region (5,2%, n=19) and the furrowed form of Karaulbazar region (12,5%, n=16), on (2%) more than Gizhduvan region (10,5%, n=19).

As show the clinical data the spotty form system hypoplasia at children of 7-12 years (85,3%, n=109) on 5,3% more than at 13-15 summer (80%, n=35). Erosive (13%, n=109) on 10% are in the lead, then at 13-15 summer (3%, n=35) children. The mixed form on 3% meets at children of 13-15 years (6%, n=35) more, than 7-12 years (2%, n=109) and the furrowed form system hypoplasia meet at children of 13-15 years (11,4%, n=35) when it is the form is not revealed at 7-12 summer children.

Thus, the amount of children with hypoplasia enamels and any it is displays tends to magnification now that confirms an urgency of the given problem.

For determination of the reasons of development, system hypoplasia enamels at anamnesis collection gave special attention to detection of influence of risk factors during the periods of formation of teeth. From the analysis of the received results it is installed that at the majority of patients with system



hypoplasia 144 (48,6%) in a bookmark of follicles, development and a mineralization of teeth were watched influence of various risk factors (tab. 1).

**Table 1****Structure of pathology of pregnancy of mothers (By results of questioning)****Settlement of Madaniyat of Bukhara region**

Factors	Abs	%
Stimulation of sort	10	33,3
Operative interference at the time of delivery	9	30
Pathology of sorts and pregnancy	11	36,7

From 64 children, 27 (42,0%) Karaulbazar, and in Gizhduvan region from 50, 17 (40,0%) children and in Settlement of Madaniyat of Bukhara region, 10 (33,3%) from 30 children with system hypoplasia of teeth were revealed that their mothers had stimulation of sorts. The pathology of pregnancy and sorts had mothers of 39,0% of Karaulbazar, 38,0% Gizhduvan regions and Settlement of Madaniyat of Bukhara region of 36,7%. Most often mothers in Karaulbazar region had transferred sharp respiratory virus infections (23,4%), hypothyroidism a thyroid gland (15,6%); toxicoses of the first and second half of pregnancy (14%); headaches and weakness (16,8%), a diarrhea (1,6%) from (n=64). In Gizhduvan region most often there were toxicoses of the first and second half of pregnancy (32%); headaches and weakness (20%), hypothyroidism a thyroid gland (10%); the transferred sharp respiratory virus infections (12%), a diarrhea (4%) from (n=50). Settlement of Madaniyat of Bukhara region the transferred sharp respiratory virus infections (30%), toxicoses of the first and second half of pregnancy (23,3%); headaches and weakness (20%); hypothyroidism a thyroid gland (10%) from (n=30).

Mothers 144 (48,6%) children in three regions of Bukhara area had a pathology of pregnancy and childbirth of 32,0%; stimulation of sorts of 17%; the transferred sharp respiratory virus infections (21,0%), hypothyroidism a thyroid



gland (12,5%); toxicoses of the first and second half of pregnancy (22,2%); headaches and weakness (21,0%), a diarrhea (2,1%).

Presence of chronic diseases of various organs and systems is reveal at children with system hypoplasia of teeth from both age groups that, in turn, has the negative influence on a mineralization of teeth. Thus from 48 children of Karaulbazar region at the age of 7-12 years, and from 16 children at the age of 13-15 years with system hypoplasia enamels, chronic disease was watch at 34 (71%) at the age of 7-12 years, and 11 (69%) at children at the age of 13-15 years, from 31of children Gizhduvan region at the age of 7-12 years, chronic disease met at 20 (64,5%) and from 19 children at the age of 13-15 years, met at 6 children (37,0%), from 30 children of Settlement of Madaniyat of Bukhara region at the age of 7-12 years, chronic disease watched at 11 children (36,7%).

From the analysis of anamnesis data follow that children at the age of 13-15 years (n=35) most often suffer infectious and parasitic illnesses (48,5%), illness of musculoskeletal system and a connective fabric (34,2%), diseases of allergic character (31,4%), disease endocrine systems, disorders of a supply and metabolism violation (26%), from total number of children of three regions, and also, illnesses of respiratory organs (2,3%). There were no chronic ENT diseases and illness of nervous system.

### The table 1.1.

#### Structure of a chronic pathology in postnatal period at children with system hypoplasia enamels at the age of 7-12 and 13-15 years in region of Karaulbazar

Diseases	Children at the age of 7-12 years (n=48)		Children at the age of 13-15 years (n=16)	
	abs.	%	abs.	%
Illnesses endocrine systems, disorders of a supply and metabolism violation	4	8,3	5	31,3
Illnesses of respiratory organs	15	31,3	0	0,0
Illnesses of musculoskeletal system and connective fabric	12	25,0	5	31,3
ENT organs diseases	1	2,1	0	0,0

Allergic diseases	<b>14</b>	29,2	<b>6</b>	37,5
Chickenpox	<b>14</b>	29,2	<b>2</b>	12,5
Diphtheria	<b>6</b>	12,5	<b>0</b>	0,0
Mumps	<b>13</b>	27,1	<b>0</b>	0,0
Measles	<b>9</b>	18,8	<b>1</b>	6,3
Flu	<b>40</b>	83,3	<b>1</b>	6,3
Hepatitis A	<b>17</b>	35,4	<b>1</b>	6,3
Other	<b>6</b>	12,5	<b>0</b>	0,0

**Structure of a chronic pathology in postnatal period at children with system hypoplasia enamels at the age of 7-12 and 13-15 years in region of Gizhduvan**

Diseases	Children at the age of 7-12 y (n=31)		Children at the age of 13-15 y (n=19)	
	abs.	%	abs.	%
Illnesses endocrine systems, disorders of a supply and metabolism violation	<b>2</b>	6,5	4	21,1
Illnesses of respiratory organs	<b>13</b>	41,9	<b>1</b>	5,3
Illnesses of musculoskeletal system and connective fabric	<b>5</b>	16,1	<b>7</b>	36,8
ENT diseases	<b>4</b>	12,9	0	0,0
Allergic diseases	<b>7</b>	22,6	<b>5</b>	26,3
Kidney diseases	<b>0</b>	0,0	<b>2</b>	10,5
Chickenpox	<b>8</b>	25,8	<b>0</b>	0,0
Mumps	<b>3</b>	9,7	<b>0</b>	0,0
Measles	<b>5</b>	16,1	<b>3</b>	15,8
Flu	<b>27</b>	87,1	<b>8</b>	42,1
Hepatitis A	<b>11</b>	35,5	<b>2</b>	10,5
Other	<b>1</b>	3,2	<b>0</b>	0,0

**Structure of a chronic pathology in postnatal the period at children with system hypoplasia enamels at the age of 7-12 and 13-15 years in region of Settlement of Madaniyat of Bukhara region**

Diseases	Children at the age of 7-12 y (n=30)	
	Abs,	%
Illnesses of respiratory organs	<b>12</b>	40,0
ENT diseases	<b>9</b>	30,0
Allergic diseases	<b>5</b>	16,7
Chickenpox	<b>2</b>	6,7
Mumps	<b>3</b>	10,0
Measles	<b>2</b>	6,7
Flu	<b>14</b>	46,7
Hepatitis A	<b>8</b>	26,7

In turn, at children at the age of 7-12 years (n=109) the greatest prevalence infectious and parasitic illnesses (57,7%) have, illnesses of respiratory organs (37%), allergic diseases (24%). There are ENT diseases (13%), endocrine systems, disorders of a supply and metabolism violation (5, 5%) slightly less often, illnesses of nervous system did not meet.

Thus, at schoolboys at the age of 7-12 years during the last years, prevalence of chronic diseases of various organs and systems much more above, than at children at the age of 13-15 years.

## RESULTS AND DISCUSSION

The above-stated advances the difficult and urgent task on treatment system hypoplasia of teeth at children taking into account ecological conditions in places, development and to implementation in practice of a complex of appropriate preventive and improving actions.

One of perspective directions in preventive maintenance of dental diseases at children is application of new means of hygiene of an oral cavity, in particular, the

toothpastes containing in the composition anti-carious, anti-inflammatory, enveloping, antitoxic, antiallergenic and antibacterial means. Taking for a basis this idea and allocating the considerable material about mineralizing, anti-inflammatory, trophy, antitoxic, antiallergenic and antibacterial influence of new toothpastes “SPLAT Biocalcium” and “SPLAT JUNIOR” we attempt to apply the given toothpaste among inspected children.

On this complex system, it was offer also secondary preventive maintenance. To children of 7-12 years assigned calcium glycerophosphate inside on 0,5 г once and ascorbic acid 2 times a day within 1 month, to children of 13-15 years - on 1,0 г once and ascorbic acid 3 times a day, in flow of 1 month with repetition of course of treatment through 3 month. Besides, assigned intake of poly-vitamins of “Komplivit” on 1-2 tablet depending on body, mass right after a breakfast. Results of the analysis of the literary data on learning of application of toothpastes “SPLAT Biocalcium” and “SPLAT JUNIOR” showed good clearing, protective and preventive efficiency

#### **Clinical observations testify to the following:**

At first, process of improving of color of a white stain in tooth happens very slowly that connected to low-level mineral an exchange of enamel and dentine. Secondly, the first minor changes are taking place only after 2 monthly complex re-mineralizing therapies and originally consist in deleting of a taking place clear boundary between a stain and normal enamel at system hypoplasia enamels. The age of patient also is very important: the earlier there is begun treatment, the faster and more noticeable; it is possible to receive good results of treatment.

Already, the first 3 months of treatment, in Karaulbazar region at the age of 7-12 years at system hypoplasia enamels the partial improving of color of stains of teeth at 4,5%, a suspension of process of 16% when for 6-9 months the partial improving of color of stains of teeth was watched at 22,7%, a suspension of process of 31,8%. At children of 13-15 years the partial improving of color of stains of teeth for 3 months was watched at 7,7%, a process suspension the partial improving of color of stains of teeth of 30,7%, a suspension of process of 61,5%

was watched at 30,7% of patients, for 6-9 months. In region of Gzhduvan at the age of 7-12 years for 3 months the partial improving of color of stains of teeth was watched 7,4%, a suspension of process of 29,6%. For 6-9 months of 18,5% the partial improving of color of stains of teeth, and a suspension of process of 44,4%. At the age of 13-15 years the partial improving of color of stains of teeth was watched in 3 months at 6,7%, a suspension of process of 40%, 6-9 months the partial improving of color of stains of teeth of 26,7%, a suspension of process at 53,3%. In Settlement of Madaniyat of Bukhara region within 3 months the partial improving of color of stains of teeth was watched at 9,1%, a process suspension 6-9 months the partial improving of color of stains of teeth of 18,2%, a suspension of process of 45,4% were watched at 27,2% at the age of 7-12 years.

During observation from 10-12 months in Karaulbazar region the partial improving of color of stains of tooth at the age of 7-12 years was from (n=44), at 13 children of 29,5%, these are 6,8% more than 3-6 months of an index, the suspension of process at (n=16) 36,3% from (n=44), is more on 4,5%. At the age of 13-15 years the partial improving of color of stains of tooth was watched at (n=7) 53,8% from (n=13), it on 23,1% treatment. In Gzhduvan region the partial improving of color of stains of tooth at children of 7-12 years from (n=27), was watched at (n=7) 26%, it on 7,5% is more, a process suspension improving was watched at (n=15) 55,5% from (n=27), on 11,1%. At the age of 13-15 years from (n=15), the partial improving of color of stains of tooth at (n=6) 40%, from (n=15), on 13,3% are more, a suspension of process of 73,3% at (n=11) from (n=15), on 20% it was more watched improving. In Settlement of Madaniyat of Bukhara region this index at the age of 7-12 years at (n=22) from (n=22) reached 32% treatment on 13,6%. A suspension of process from (n=22) improving on 9,1% was watched at 54,5%.

In three regions of Bukhara city, during observation with 10-12 month. The partial improving of color stains of tooth at the age of 7-12 years from (n=93), at 27 persons (29%), it on 16% exceeds an index 6-9 months, a process suspension on 7,5% (46,2%) at 43 children from (n=93). In age of 13-15 years the partial

improving of color of stains of tooth increased by 17,8% at 13 children of 46,4%, from (n=28) a suspension of process of tooth for this period was watched at 21 patients of 75% from (n=28), improving was at 18%.

Being based on the received data, we consider most correct and effective conservative treatment of spotty forms of hypoplasia. It demands some time (from 3 months - until 1 and more years), but going on without instrumental interferences in structure of teeth. As regards erosive form, mixed and furrowed (meets very rarely) forms considered non-carious defeats of teeth, led the following. After one month of complex therapy, we started to fill the teeth. Thus in case of enough deep defects in the beginning superimposed insulating spacers from glass ionomer cement (Ionosit Baseliner), and then a composite luminous material (XRV HERCULITE™). Only at insignificant defects of teeth were restricted overlay of quality adhesive (Bond solo plus) and a composite luminous seal (XRV HERCULITE™). Further after filling recommended to children a covering of teeth fluoride and further, every 3-month to repeat reception calcium glycerol-phosphate. It allowed fixing results of the led treatment.

In table 2, the data about safety of seals in process of observation presented. So, in 3,6-9 months the full safety of seals at erosive and the mixed forms it appeared at 100% treated children of both age indexes. In 11 months 7-12 summer age and partial save were completely saved fillings at 87,5% of children was watched at 6,7%, at children of 13-15 years an index of safety of a seal of 100%. In 12 months' number of partially saved seals at children of 7-12 years made 16,7%, the full drop-out at 8,3% and the full saving of a seal was watched at 75% of children. At the age of 13-15 years seal partial save was watched at 16,7 number of the saved seals at 83,3%. Completely loss of fillings in children 13-15 summer ages not watched. Some failures, which were observer at preventive maintenance and treatment, appeared is connected to bad or insufficient discipline carrying out of the assigned medical actions.

Table- 2

**Data about safety of the composite seals allocated after preliminary re-mineralizing of therapy erosive and the mixed forms system hypoplasia in three regions of Bukhara area at the age of 7-12 and 13-15 years**

Safety of fillings	Observation period									
	After 3 month		After 6 month		After 9-10 month		After 11 month		After 12 month	
	Erosive and mixed forms (n=16) 7-12 year	Erosive and mixed forms (n=7) 13-15 year	Erosive and mixed forms (n=16) 7-12 year	Erosive and mixed forms (n=7) 13-15 year	Erosive and mixed forms (n=16) 7-12 year	Erosive and mixed forms (n=7) 13-15 year	erosive and mixed forms (n=15) 7-12 year	erosive and mixed forms (n=7) 13-15 year	erosive and mixed forms (n=12) 7-12 year	erosive and mixed forms (n=6) 13-15 year
full	16 (100%)	7 (100%)	16 (100%)	7 (100%)	16 (100%)	7 (100%)	14 (87,5%)	7 (100%)	9 (75%)	5 (83,3%)
partly	-	-	-	-	-	-	1 (6,7%)	-	2 (16,7%)	1 (16,7%)
Full down	-	-	-	-	-	-	-	-	1 (8,3%)	-

**Data about observation of children with partial improving in color stains and a process suspension. Observation of safety of the composite seals allocated after preliminary re-mineralizing of therapy of the spotty form system hypoplasia in three regions of Bukhara area at the age of 7-12 and 13-15 years**

Safety of fillings	Observation periods		
	9-10 month	11 month	12 month



	The spotty form (n=38) 7-12year	The spotty form (n=4) 13-15year	The spotty form (n=38) 7-12 year	The spotty form (n=4) 13-15year	The spotty form n=37 7-12 year	The spotty form (n=3) 13-15year
full	38(100%)	4(100%)	38(100%)	4(100%)	36(97,2%)	2(66,7%)
Partly	-	-	-	-	1(2,7%)	1(33,3%)
Full down	-	-	-	-	-	-

*The remark in brackets are specified number watched and treated teeth*

Some generalizations allowed to make the analysis of the presented all data and to advance certain positions on tactics and treatments of patients with disease system hypoplasia of teeth for the warning of complications of the given disease.

An important role plays differential diagnostics defeats of system hypoplasia of tooth and carrying out preliminary complex (the general and local) remineralizing therapies with careful control over quality cleanings teeth (it very much raises success and efficiency local procedures) allows to receive the positive results at treatment and the warning of complications of all forms system hypoplasia of teeth.

As showed results of the led treatment without preliminary remineralizing to therapy it is impossible to begin at once procedure of sealing of teeth as at erosive, the mixed and furrowed forms system hypoplasia violation of all structure of enamel and dentine watched. It leads to dropout of seals and the further corrupting of tooth.

Group of children of hypoplasia prophylactic medical examinations and treatment even, after filling and improving of color of stains of teeth need in further observation.

## CONCLUSION

1. System hypoplasia enamels of a second teeth it is found out at 144 (48,6%) children. From them at the age of 13-15 years at 35 persons (24,3%), and at the age of 7-12 years at 109 persons (75,7%). In Karaulbazar region it is revealed at 44,4%, in Gizhduvan at 34,7%, Settlement of Madaniyat of Bukhara

region at 21%. The index system hypoplasia in Karaulbazar region on 24% is more than in Settlement of Madaniyat of Bukhara region and on 10% of Gizhduvan region.

2. Mothers 144 (48,6%) children in three regions of Bukhara area had a pathology of pregnancy and childbirth of 32,0%; stimulation of sorts of 17%; the transferred sharp respiratory virus infections (21,0%), hypothyroidism a thyroid gland (12,5%); toxicoses of the first and second half of pregnancy (22,2%); headaches and weakness (21,0%), a diarrhea (2,1%).

3. Thus, at schoolboys at the age of 7-12 years during the last years prevalence of chronic diseases of various organs and systems much more above, than at children at the age of 13-15 years

4. Clinically proven, treatment effectiveness of spotty forms system hypoplasia of teeth by application remineralizing therapies including course reception peros glycerophosphate calcium, a complex of microelements, vitamins and remineralizing compositions in an oral cavity, as application of 10% calcium gluconate, tooth-pastes «SPLAT Biocalcium» since 12 years, «SPLAT JUNIOR» 6-11years and conditioner SPLAT «Wood grasses» and «SPLAT Biocalcium». In observation from 10-12 months in Karaulbazar region the partial improving of color of stains of tooth at the age of 7-12 years was 29,5%, a suspension of process at 36,3%. At the age of 13-15 years the partial improving of color of stains of teeth was watched at 53,8%. In Gizhduvan region the partial improving of color of stains of tooth at children of 7-12 years watched at 26%, a process suspension watched at 55,5%. At the age of 13-15 years, the partial improving of color of stains of teeth observed in 40%, a suspension of process at 73,3%. In settlement “Madaniyat” of Bukhara region this index at the age of 7-12 years reached 32%, the partial improving of color of stains of teeth was watched at 54,5%. Application of a method within 10-12 months provided the partial improving of color of stains of tooth at the age of 7-12 years in three regions of Bukhara region on 29%, a process suspension on 43,2%. At the age of 13-15 years the partial improving of color of stains of teeth on 46,4%, a process suspension for this period on 75%.

5. The treatment method erosive, furrowed and mixed forms system hypoplasia includes course remineralizing therapies volume, which defined proposed by us an index of defeat of enamel with the subsequent expanded preparation and defect closing by a composite luminous material (XRV HERCULITE™) with lined from glass ionomer cement (Ionosit Baseline). Method application provides the full safety of seals after a year after sealing in 80% of observations that authentically above, then at standard treatment with using sparing preparation.

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