

## PROFESSIONAL PATHOLOGY OF ORAL CAVITY

ALINA CRISTIAN<sup>1</sup>, DORIN BARDAC<sup>2</sup>

<sup>1,2</sup>University "Lucian Blaga" of Sibiu

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**Abstract:** This article presents aspects of the pathology of the oral cavity caused by prolonged exposure to various occupational hazards, and stresses the importance of good cooperation between dentist and physician labor. Early diagnosis of intraoral lesions and their identification in the context of systemic clinical occupational hazards, help to implement preventive and treatment measures in order to improve the quality of life of affected people.

**Cuvinte cheie:** noxe  
profesionale, cavitatea  
orală, stomatite

**Rezumat:** Articolul prezintă aspecte ale patologiei cavității orale determinate de expunerea prelungită la diverse noxe profesionale, și subliniază importanța unei bune colaborări între medicul dentist și medicul de medicina muncii. Diagnosticarea precoce a leziunilor intraorale și identificarea lor, în contextul clinic sistemic al noxelor profesionale, ajută la implementarea măsurilor de prevenție și tratament ce cresc calitatea vieții persoanelor afectate.

### SCIENTIFIC ARTICLE OF BIBLIOGRAPHIC SYNTHESIS

In the process of industrialization, especially in the evolution and diversification of the production processes of the last century, new and various chemicals that have a high toxic potential appeared. This exercise is potentially toxic and causes the whole body exposure oro-maxillo-facial system to various impurities which have undesirable repercussions on the oral cavity and the entire stomatognathic system [4,5].

Oral cavity, through its various components: teeth, oral mucosa, supporting units, teeth, salivary glands, oropharynx is a gateway to various pathogens due to exposure to toxic action of various occupational hazards.

Adverse working conditions can generate or facilitate the emergence of diseases of the oral cavity or its components that are detectable on clinical examination in dental offices or ambulatory, to be transmitted to the occupational medicine specialist units [3,4,6].

In the clinical examination, your dentist can make certain clarifications to establish a diagnosis of oro-dental pathology training. In this context, significant symptoms may be given by:

- emergence of disease-specific oral cavity, but have a higher frequency in a particular group of patients whose profession may be considered specific exposed and contaminant.
- development of dental problems specific to a certain diagnosis, but have a special character or a higher frequency in a particular group of patients whose profession may be considered specific contaminant [4].

So whether diseases that occur in specific clinical examination of the patient are non-specific for a particular type of diagnosis, it should be noted that they may occur in the course of occupational poisoning can be stand alone or as an expression of incriminating only the dental -jaw. You must complete a diagnosis based on the fact that not all occupational poisonings are accompanied by disease or disorders of the

stomatognathic system and sometimes events occur at that level late in development, as a symptom of occupational poisoning and therefore, early detection is irrelevant to systemic pathology [3,4,5].

Periodontal tissue is therefore the mirror of diseases caused by occupational hazards and damage involves weakening the structural strength of dental units with repercussions on all the dento-maxillary functions: chewing, swallowing, phonation and physiognomy [2,6].

It is imperative to investigate the periodic, preventive dental-maxillary apparatus for maintaining oral health because:

- oral cavity is a gateway for many toxic substances they are exposed to patients who work in specific environmental contaminant.
- occupational poisoning can be detected early by intraoral manifestations that they bring.
- there is some interrelationship between the absorption of certain toxic substances and morbidity through various orodental injuries.
- Patients may be monitored and informed about the dangers of affecting the dento-maxillary to focus on prevention, on a rigorous oral hygiene awareness and presentation of a clinical outpatient dental specialist regularly, but at the little sign of damage to periodontal tissue.

Disorders of the oral cavity or the entire stomatognathic system may be the clinical symptoms of the poisoning of a professional or may be considered as such problems themselves, regardless of systemic expression of the body. In the analysis of many clinical cases we can meet changing natural appearance of dental structures and other components of the oral cavity, but not consider them as problems, they have the status of a witness in a prolonged exposure to occupational risk, so-called professional stigmata [1, 3].

In defining the context of oro-dental pathology, industrial toxins as specific chemicals encountered in the production process, but which penetrate the body in relatively

<sup>1</sup>Corresponding Author: Alina Cristian, SC Dentestet SRL Sibiu, 1B, O. Goga street, Sibiu, Romania; tel +40-0727786461  
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## CLINICAL ASPECTS

low doses. The gateway can be respiratory, skin or digestive enzyme with further implications at the immunological or allergic disorders causing the whole body's vital functions.

Oral cavity has direct relationships with respiratory and digestive tracts and therefore at this level, well ahead of other organs, in some clinical cases will highlight the damaging action of industrial toxins.

We seek submission of several elements considered to be the first clinical symptoms leading to early detection of occupational risk. Proper analysis of these symptoms over time reveals the complex clinical picture of certain occupational poisonings.

As a protective barrier against infections and toxic substances and thus reaching the oral cavity environment is deemed to have an important role in saliva and oral mucosa.

Oral mucosa is in direct contact with all products being acquired and (which can chemically alter) the composition or shape. In this context of repeated exposure to noxious disease, oral mucosa can regenerate if their saliva acts as mechanical and antiseptic. Saliva for the presence of a filter that can adequately perform these functions is necessary for secretion of saliva should be in sufficient quantity and of normal consistency. As salivary glands are an excretory channel for various toxic substances in the body, poisoning clearly alter the composition of saliva, especially if the context of the natural substances in kidney or partially lost their digestive functions, thereby getting the oral mucosa role in substitution of these functions [3,4].

The integrity of the oral mucosa and salivary secretion are thus two key factors in maintaining local homeostasis of the oral cavity. Similar weaknesses at this level in the context of body exposure to toxic substances triggering stomatitis.

Early signs of stomatitis, the clinical expression of the occupational hazards include such elementary lesions papules, vesicles or pustules and continuity solutions such as erosion or cracks [1,2]. Prolonged exposure to these pollutants induce the clinical setting of stomatitis which may be:

- Catarrhal stomatitis with dryness, heat and burning of the oral mucosa, salivation occurs infrequently, and the lining is red and glossy.
- Erythematous stomatitis, which, in addition to clinical signs listed above, are also added an inflammatory exudate on the mucosal surface is observed as a blue wrapper, especially on mobile oral mucosa. Descumative mucosa is common.
- Vesicular stomatitis vesiculo-pustular, whose clinical picture is the continued presence of mucous vesicles.
- Bullous stomatitis, which is primary, such as bubble or thermal, or chemical. These bubbles confluence and break, leaving areas of oral mucosa with secondary erosion hurt.
- Necrotic or ulcerative stomatitis-membranous colitis is the most common occupational hazards in pathology, oral mucosa affecting both fixed and mobile as passive-mobile. Interdental papillae are swollen, purple, then ulcerate and covered with a fibrin-like deposit of a false membrane. Interdental papilla and then progressing ulceration destroying the package and then dental areas, leading to bad breath.

Each type of training has a specific contaminant intraoral specific clinical expression. Among these are:

- Saturn lizerum gum and satun stomatitis - lead poisoning;
- Mercurial lizerum and stomatitis - mercury poisoning;
- Poisoning with phosphorus, fluorine, antimony, manganese, cadmium, vanadium, silver, zinc, copper, chromium, toluene;

- Industrial dental erosion in the intoxication produced by oil / mineral acids;
- Clinical expression of occupational exposure to various body dust: silicosis, textile dust and powder sugar and flour;
- The clinical term exposure to various body vibrations or physical agents that produce hiperbarism, or different agents that produce mechanical abrasion dental highlights.

Most occupational hazards have intraoral manifestations are shown in heavy industry, but as we mentioned there are in light industry, the example being set by prolonged exposure to dust due bisinoza textiles.

In this type of contaminant, spinning dust plays an important role on the oral mucosa. The powder is made of textile plant dust with mineral and organic impurities, is contaminated with germs and fungus.

Clinical intraoral professional textile dust poisoning include dry mouth, increased saliva viscosity and acidity, which induces a lack of self-prune. In this context carious lesions occur frequently and chronic inflammation of the oral mucosa. There is a direct mechanical irritation to the oral cavity, produced from fiber to reach the mucosa and an increased risk of bacterial infection-induced inflammatory and mucus contamination by these textile fibers [4,5].

## CONCLUSIONS

- Cooperation between dentist and physician labor, has an important role in early detection of occupational hazards with expression and intraoral clinical diagnosis reflecting their associated oral pathology.
- Different pathogens toxicity due to occupational exposure to the action of various pollutants entering the body through the oral cavity.
- Periodontal tissue disorders caused by occupational hazards are found in clinical implications on the functionality of the dento-maxillary.
- Professional relationship of contaminant - oro-dental pathology is not a simple linear one but a complex sinuous various fields affecting the entire body
- Critical importance in maintaining homeostasis of the oral cavity, has the integrity of oral mucosa and salivary secretion, any failure at this level, in the context of organism exposure to toxic substances, resulting in the appearance of stomatitis and contribute to decreased quality of life of people affected.

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