



Risk in Disabled Patients: A Review

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Abstract

An exhaustive bibliographic review was carried out about the main complications and risks in patients with disabilities from a dental perspective. In this chapter we will emphasize patients who have certain special characteristics that can change the normal routine to carry out any procedure. The disabled or special patient is that individual, whether an infant or adult, who may show signs and symptoms that deviate from normal parameters, so they may be medically compromised, or with some type of physical, mental, sensory or disability. behavioral problems. In dentistry, the special patient is that person who, for his or her Care requires special maneuvers, concepts, equipment and helpers, that is, they go beyond the standard programs and routines carried out to maintain the oral health of the population.

Keywords: Risk, Disabled Patients, Stomatology

Introduction

In our profession we pay attention to different types of patients, with a wide variety of characters, physical, social, behavioral, etc. Therefore, the health professional in this case of stomatology must be prepared to provide quality care to the needy who comes to his or her office in search of relief [1].

The person with a health condition has a chronic disease that develops slowly and persists for a long period of time, and, consequently, also receives long-term treatments. They require special care when performing interventions, even minimally surgical ones, as is the case with dental treatment. There are multiple prenatal, perinatal and postnatal factors that can generate disability. Prenatal factors such as dominant and recessive hereditary conditions, chromosomal aberrations, infections (rubiola and toxoplasmosis), alcohol and drug poisoning during pregnancy, radiation, malnutrition, etc., predominate in 90%. Perinatal events such as trauma, lack of oxygen during birth, or prematurity extreme, comprising 5%, and postnatal infections (meningitis and encephalitis), poisoning, trauma and tumors, comprise the other 5% [2,3].

The United Nations and the World Health Organization agree that Statistics show that 10% of the world's population is a carrier of disabilities of different types and severities. There is an increase in the percentage of disabled people worldwide, especially in the ages 6 and 16, more frequent in boys than in girls.

This increase may Because these children have a longer life expectancy thanks to progress in medicine, or the fact that more and more young people are disabled as a result of accidents or violent acts. It also seems that the number of disabled people among older people tends to increase. In the United States, approximately 2% of school-age children have a severe developmental disability such as mental retardation or cerebral palsy, and require special educational services or additional care, and 17% of those under 18 years have a developmental disability. It is considered that worldwide the majority of the population with disabilities does not receive oral care according to their requirements [2,3].

Objective

Describe the main dental risks in patients with disabilities.

Reference Search Methods

The scientific information was compiled through a search using the following descriptors in English: The Medical Subject Headings (MeSH): "dentistry, risks in dentistry, syndromes, disability.

Analysis strategy

The search was based solely on patients with disabilities.

Developing.

According to data from the World Health Organization, two thirds of the population with disabilities do not receive any oral

care, and although the estimated percentages of the population with disabilities vary from one location to another, the comprehensive health aspects for this population group do not include oral rehabilitation. Despite the important role that the dental profession represents in the rehabilitation of the disabled has been recognized, they are not always welcomed and many Dentists are not motivated to accept them as patients, issuing referral criteria without trying to treat them through conventional means [2,4].

The lack of knowledge of the oral problems that they may present, associated with their own emotional reactions and those of their family members, the underlying pathologies that affects, as well as the professional's own reactions, surely create the greatest barrier to accessing the possibilities of their care. In Cuba, the health of the disabled has been prioritized, developing programs in response to the National Action Plan for Care of the Disabled and creating specialized institutes for their care. In the 80s they began to implement dental care programs for the population with disabilities and problems that needed special attention [4,5].

The current program of comprehensive dental care for the population contains dental actions to be developed in special patients. Caring for disabled patients is gaining more interest every day among healthcare professionals. health, but despite all the efforts aimed at improving the quality of life of these people, gaps and taboos continue to exist when it comes to their care. Motivated by this, we decided to make this chapter with the purpose of providing knowledge about the risks of stomatological surgical treatment of disabled or special patients, and in this way contribute to improving the quality of the comprehensive stomatological care provided to them.

In the next chapter we will begin by talking about the different conditions of origin neurological that leads to disability and the behavior to follow with said patients. Child brain paralysis Cerebral palsy is a group of disorders that affect movement and tone muscle or posture. It is caused by damage to the developing immature brain, with most frequently before birth. Signs and symptoms appear during childhood or preschool years. In general, cerebral palsy causes impaired movement associated with exaggerated reflexes, distension or spasticity of the extremities and trunk, unusual posture, movements involuntary, unsteady gait, or some combination of these [2,3].

People with cerebral palsy may have trouble swallowing and usually have an ocular muscle imbalance, in which the eyes do not focus on the same object. They may also have a reduced range of motion in several joints of the body due to muscle stiffness. The cause of cerebral palsy and its effect on function vary greatly. Some people with cerebral palsy can walk; others need help. Some people They have intellectual disabilities, but others do not. They may also have epilepsy, blindness or deafness. Cerebral palsy is a lifelong disorder. There is no cure, but treatments can help improve

function. Symptoms The signs and symptoms of cerebral palsy can vary widely from person to person. Cerebral palsy may affect the entire body or may be limited primarily to one or two limbs, or to one side of the body. In general, signs and symptoms include problems with movement and coordination, speech and feeding, development, and other problems [5,6].

The literature agrees that in all cases the stomatologist must be familiar with the management of these disorders, and that they require working together with the team. multidisciplinary that cares for them, with the purpose of providing the patient with the best care possible and minimize the complications inherent to your condition. The dental care of these patients will be based on oral surgery as part of the treatment in order to improve the quality of life, for which A group of risk factors is taken into account when deciding to have surgery before being evaluated by the anesthesia specialty. Within these factors we have: when the last seizure was and how long it lasted [7,8].

The medications they consume as and prescribed doses. Skin injuries either from insect bites or self-harm. History of bleeding, recent respiratory alteration and what medications were consumed during it, history of viral diseases (Dengue, Hepatitis), kidney and cardiovascular disorders. It is important to keep in mind in these patients a set of indications to avoid major complications during the surgical procedure such as pediatric assessment together with its nutritional evaluation, neurological evaluation that should not exceed 5 months, the indication of basic and specific complementary supplements to later be entered in the hospital institution.

Patient in the living room. The patient is taken to the room in optimal conditions for the surgical procedure where he is prepared in the pre-operative cubicle, where the vascular line is channeled for the placement of hydration and pre-medication. During this procedure it is important to highlight a set of risks which complicate the patient's life, among them we have: inaccessible veins due to anatomical alterations, thickness of the skin that does not allow reaching the blood vessel, lipothymia or fainting due to prolonged fasting while waiting for the surgery. Decrease or increase in tension levels due to pre-surgical stress, anaphylaxis to medications used before surgery [7,8].

Transsurgical risk

- Hemorrhages
- Decrease in saturation
- Cardiac arrests (given by Bradycardias, Tachycardias)
- Cyanosis
- Anaphylaxis to the different medications used
- Decreased pulmonary ventilation due to non-expansion of the rib cage Post surgical
- Hemorrhages
- Immediate nausea due to the effects of anesthesia

- Broncho spasm and laryngospasm due to the presence of alterations or malformations of respiratory structures is common in cases that arise due to surgical emergencies) which are received as they arrive at the emergency service.
- Edema in the operated area which could spread to structures that compromise the patient's life.
- Post-surgical infections in the treated area after 24 hours outside the hospital institution. West Syndrome West syndrome, or infantile spasms syndrome as it is also called known, it is a very rare and uncommon childhood brain disorder. Was first described by William James West.

There are three characteristics that reveal the existence of West syndrome: spasms epileptics, delay in psychomotor development and hypersarrhythmia, which is a notable disorganization of brain waves, visible on an electroencephalogram. The disease usually manifests itself between the ages of 4 and 8. months, although there are known cases in which it has manifested itself later, even up to 2 years [7,8].

The first manifestation is spasms or convulsions, which consist of Sudden bending of the body forward, with stiffness in the arms and legs. There are statistical data that indicate that the incidence of this disease is 1 case between 4,000 and 6,000 births, with the disease predominating in males. No There is evidence that this disorder is hereditary, since it has not been found in patient's family history of the disease. Causes of West syndrome Infantile spasms appear to be the result of some abnormalities in the structure of the brain, due to abnormal activity in different parts of it. That is what which can be seen on the electroencephalogram (hypersarrhythmia). This sudden appearance of Spasms indicate immaturity in the central nervous system and could be related to the cause of the disease. The causes of the disease are attributed to chromosomal abnormalities, neurofibromatosis, infections and metabolic diseases, and ischemic hypoxia as causes before birth or prenatally [7,8].

There are also perinatal causes (from 1 to 28 weeks of gestation), such as encephalopathy hypoxic-ischemic, due to neuronal necrosis or hypoglycemia. Finally, there are postnatal causes, such as bacterial meningitis or brain abscesses. Treatment The primary goal of treatment for children with West syndrome is to improve your quality of life, since there is no known cure.

Therefore, the Treatment focuses on eliminating seizures and giving children medications for the shortest time possible since this can avoid the side effects that arise from the treatment. Drugs used in treatment include corticosteroids, medications antiepileptics, pyridoxine and of course vigabatrin, which is the first option for comply with treatment. Taking into account the neurological alteration and its relationship with the oral mucosa, we must specify that these patients must be treated under general anesthesia, keeping in mind the level of surgical risk before, during and after oral surgery [2,5].

To avoid any surgical complications, it is necessary to carry out a good clinical examination of the patient, verify the consultations with the specialty pediatrician in which he will outline everything concerning the patient and the neurology consultation which will inform us of the medication dose consumed by the patient. patient. Risks before surgery Recent seizure episodes (one week before surgery) Alteration of the indicated supplements (Hemogram, Liver Profile) Reaction to previously used anesthetic medications History of recent respiratory illnesses (one week before) History of infectious diseases (viral, fungal and bacterial) Dermatological alterations (scabies, mycosis, etc.) Spread of the infection due to excessive waiting time for surgical treatment that puts an end to the appearance of brain abscesses.

Risks during surger

- Hemorrhages
- Decrease in oxygen saturation
- Laryngo spasms and bronchospasms
- Distal or local cyanosis Post-surgical risks
- Hemorrhage
- Nausea
- Edema in the treated area
- Post surgical infections

The behavior to follow will depend on the event that is happening at that moment, since be it before, during or after the intervention.

Down's Syndrome Down syndrome is a condition in which a person has an extra chromosome. Chromosomes are small "packages" of genes in the body. Babies with syndrome Down syndrome have an extra copy of one of these chromosomes: chromosome 21 [7,8].

Common physical characteristics of Down syndrome include:

- Flattened face, especially on the bridge of the nose Almond-shaped eyes, slanted upwards Short neck Small ears Tongue that tends to stick out of the mouth
- Tiny white spots on the iris of the eye (the colored part)
- Small hands and feet
- A single crease in the palm of the hand (palmar crease)
- Little fingers small and sometimes curved towards the thumb
- Weak muscle tone or loose ligaments
- Shorter height in childhood and adulthood
- Health problems Many people with Down syndrome have typical facial features and no other major birth defects. However, others may have one or more defects of older births or other medical problems. Some of the most common health problems common among children with Down syndrome are listed below [8].
- Hearing loss.

- Obstructive sleep apnea, which is a condition in which a person temporarily stops breathing while sleeping.
- Ear infections.
- Eye diseases, such as cataracts, and eye problems that require glasses.
- Heart defects present from birth. Other less common health problems among people with Down syndrome include:
- Intestinal obstructions from birth that require surgery.
- Hip dislocation.
- Thyroid disease.
- Anemia (when red blood cells cannot carry enough oxygen to the body) and iron deficiency (anemia in which red blood cells do not have enough iron).
- Leukemia from infancy or early childhood.

Hirschsprung's disease

In these patients to be treated in the stomatology services, especially under general anesthesia, from the surgical point of view we take into account all the health history that they present because they are a group within the health system with a number of comorbidities that make the more difficult stomatological treatment under general anesthesia [4-8].

The conduct to be followed in these cases will be the same as that adopted in the cases above, highlighting that when they come to the consultation with a history of congenital heart diseases, cardiovascular tests such as echo cardiogram, electrocardiogram, chest X-ray to rule out abnormalities cardiopulmonary, cervical X-ray is also indicated to rule out alterations or malformations of the trachea due to the anatomy of the neck, in addition to its consultation with the cardiologist who assists him. With all this, we can undertake oral surgery as long as it is evaluated by the anesthesiologist. With the recommended surgery we can gain quality of life in these patients, but we must take into account the risks that occur before, during and after.

Pre-surgical risks

- Viral infections of respiratory or hepatic or systemic origin (colds, hepatitis, dengue, etc.)
- Dermatological diseases or skin disorders (scabies, skin erythema typical of insect bites or infections from friction burns).
- Drug reactions to anesthetics used in surgery
- Coagulation disorder due to platelet alteration
- Anemias
- Altered ultrasounds and electrocardiograms where they can rule out low cardiac activity along with low cardiac function
- Spread of the infection towards fascial spaces due to bacterial multiplication

Transsurgical risks

- Hemorrhages
- Distal and local cyanosis
- Decreased oxygen saturation
- Laryngospasm and bronchospasm due to congenital malformations at the level of the larynx or malformation at the respiratory level that prevent lung ventilation.
- Pulse alterations (bradycardia, tachycardias and strasytoses)

Post surgical risks

- Post-surgery hemorrhages due to displacement of the suture due to tongue movements.
- Post-surgical infections in the operated area
- Post-anesthesia nausea (due to prolonged fasting)
- Delayed post-surgical recovery. The conduct to be followed in these patients, as mentioned in the previous cases, will depend on the type of complication that is present. It is important to highlight the importance that in this group of patients, as they present cardiovascular malformations, it is essential that before surgery, antibiotics should be prescribed as the group of protocolized beta-lactams (Penicillin Rapilenta 1 bb half an hour before surgery) to avoid cardiovascular infections [4-8].

Autism

- Autism is considered the greatest mental disorder of childhood, so these patients need great dedication from their families and society to raise their quality of life. Its prognosis depends, to a large extent, on early diagnosis and timely, multidisciplinary and intersectoral treatment. Currently it is considered the most fascinating paradigm of the major psychiatric disorders of childhood, although the natural chronological course leads it to transcend the limits of the Specialty of Pediatrics [4-8].
- Its study has been and is a challenge for Specialists in Psychology, Pedagogy and Medicine, who have not agreed on the matter and issue opposing opinions regarding the subject. For various reasons, the problem appears more and more often and is on the way to overcome serious chronic processes such as Down syndrome or even childhood and adolescent diabetes mellitus. Autism affects four or five out of every 10,000 children born alive and, probably three times more for boys than for girls. In Cuba the prevalence is 0.4 per 10,000, which is very low compared to the rates reported in the world. The Autism Society of America, in August 1996, offered the following definition: "Autism is a severe, disabling, lifelong developmental disability that typically appears in the first three years of life. It is the result of a neurological disorder that affects the functioning of the brain. It has been found throughout the world and in families of all racial, ethnic and social back-

grounds. There are no psychological environmental factors that are known to cause autism." According to this definition, some behavioral symptoms of autism include:

- Problems in physical, social and language skills.
- Abnormal responses to sensations.
- Some sense or combination of these or their responses will be affected: sight, hearing, touch, balance, smell, taste, reaction to pain, and the way the child holds her body.
- Language and speech are absent or delayed, while some abilities Specific thoughts may be present.
- Abnormal ways of relating to people, objects and events.
- The presence of a markedly abnormal or deficient development of social interaction and communication and an extremely large repertoire of non-functional routines or rituals.
- Stereotypical body movements include the hands (flapping, tapping) or the entire body (swaying, leaning, rocking) and postural abnormalities such as tiptoe walking may be present.
- Furthermore, these subjects experience a persistent preoccupation with certain parts of objects such as buttons, different parts of the body and may also become fascinated by a certain movement, for an unlimited time [4-8].

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Conclusion

The main complications and risks that can occur in disabled patients were described, emphasizing the dental environment. Among the multiple risks, these can be divided into preoperative, transoperative and postoperative, where infections and bleeding can be common.

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