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Review Article

Risks and Complications in Patients with Oral and Maxillofacial Dermatological Conditions

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Abstract

The skin is the largest organ of the human body, it fulfills multiple functions that make it an anatomical structure, essential for life. There are multiple conditions that can occur in the buccomaxillofacial complex from a dermatological point of view. This motivated the realization of the present investigation with the objective of describing the main risks and complications in patients with dermatological conditions in the buccomaxillofacial complex. For this, an exhaustive bibliographic review was carried out based on national and international literature, using different descriptors in English and Spanish. The previous experience of the author was taken into account. Then a critical analysis was carried out, where the main risks and complications that may occur in these patients were collected. Dissimilar conditions and the scope of therapeutic procedures performed in these patients with dermatological conditions were illustrated. The content was organized by the different types of dermatological reactions and their main risks. It exposes in a structured and schematic way several of the complications that can occur in these conditions. At the end of the investigation, it is concluded that there are multiple complications and risks to which these patients are exposed, causing functional, mechanical, aesthetic and psychological alterations.

Keywords: Dermatology; Oromaxillofacial Manifestation; Orofacial Dermatology

Introduction

The skin is the largest organ of the human body, it fulfills multiple functions that make it an anatomical structure, essential for life.

It is the first defense barrier that we have, and that is why it is exposed to different traumatisms since we are born. On many occasions it is attacked by the person himself, due to the excessive use of cosmetics and pharmaceutical products, or by the professional himself. In addition, there are other risk factors that we will mention for injuries.

There are several diseases that can affect this organ, and stomatologists, whatever their specialty, must know the main dermatological conditions that could occur in the cervico-maxillofacial complex.

Since many of these injuries in their prodrome initiate the stomatognathic system, and we can contribute to the diagnosis. And of course master the complications and risks that may appear.

Objective

To describe some of the main complications and risks of dermatological lesions in the buccomaxillofacial complex.

Reference Search Methods

The scientific information was compiled through a search using the following descriptors in English: the Medical Subject Headings (MeSH): "dermatology, oral cavity, Risks, Complication, Head and Neck.

Analysis Strategy

The search was based solely on dermatological conditions of the buccomaxillofacial complex

Developing

Acne vulgaris (juvenile acne, polymorphic acne)

It is based on a chronic inflammation of the pilo-sebaceous unit produced by retention of sebaceous tissue. It appears at puberty, in people with seborrheic skin, it predominates on the face and chest.

Its distribution is universal; It affects most adolescents and tends to disappear around the age of 20, although it is sometimes prolonged. It slightly predominates in males.

The lesions are comedones, papules and pustules, there may be abscesses, cysts and scars.

The fundamental pathogenic factors are: abnormal follicular keratinization, increased sebaceous secretion, bacterial colonization and local inflammation.

These patients often attend consultation, and if they are in an acute phase or the inflammatory process is exacerbated, any surgical procedure in the facial region should be delayed. Well, the tissues would not heal properly.

In the case of oral procedures such as extraction, the authors consider it necessary to postpone them as well, until the local condition of the region affected by acne improves, since on many occasions these periods of crisis are related to processes that have affected the immune system. Therefore, adding a surgical trauma would only worsen the patient's condition, exposing him to other complications. Tincopa [1].

For our part, the main thing that we must tell the sick is that they reinforce the hygiene of the area, washing with boiled water and soap. Explaining to them the importance of not squeezing or scratching their skin, as they could become infected, and even cause non-odontogenic facial cellulitis. If deemed appropriate, refer to a specialist in dermatology.

Corticodermas

They are reactions that occur in the skin due to excessive use of glucocorticoids. They can be primary or secondary.

They occur at any age, and predominate between the second and third decades of life, especially in women.

In maxillofacial surgery, the use of steroids in their different modalities is frequent, so it is necessary to be well informed in the techniques and methods for their dissimilar applications.

Topical corticosteroids (TC) are compounds formulated for application to the skin and mucous membranes. They diffuse through the stratum corneum by passive diffusion, traversing the cell membrane to reach the cytoplasm of keratinocytes and other cells located in the epidermis and dermis. Tincopa [1].

Among its properties is the antiproliferative effect on the epidermis and dermis, mediated by the inhibition of DNA synthesis in epithelial cells. This induces morphological changes in the fibroblasts, inhibits the synthesis of collagen and glycosaminoglycans, which produces dermal atrophy and delayed re-epithelialization. The latter is evident in the delay of wound healing [2].

Currently, research on the new CTs has focused on optimizing their potency and minimizing their adverse effects, by generating molecules that retain high activity in the skin, where they are quickly degraded into inactive metabolites, which mitigates possible effects. local and systemic side effects. These are called 'mild corticosteroids' or 'mild corticosteroids', including budesonide, hydrocortisone diester-17-21-aceponate, hydrocortisone 17-butyrate-21-propionate, prednicarbate, methylprednisolone aceponate, alclomethasone propionate, fluticasone propionate, and mometasone furoate.

All of them have the benefit of having a powerful anti-inflammatory effect, but with minimal ability to induce skin atrophy, so they can be used on large areas of the skin in children, face, scrotum, in addition to having a lower risk of developing allergic reactions [1,2].

There are multiple parameters to take into account when prescribing a treatment of this nature.

For example, depending on the vehicle or excipient that stabilizes, solubilizes and increases the biological activity of the topical medication. This will be the penetration and the form of presentation.

Thus, with the same active ingredient, dose and concentration, the potency decreases in the following order

Figure 1: Order in which the potency of the drugs decreases. (ROS: Reactive oxygen species; DNA: Deoxyribonucleic acid).

The location is important because the genital region is not the same as the skin of the eyelid, which has great penetration, 4 times more than comparing it with the skin of the forehead.

Perioral (perioral) dermatitis

Unilateral or symmetrical rash that may appear at the medication application site or elsewhere. It affects seborrheic regions, nasolabial folds and chin. In the perioral region, it respects a small area immediately to the edge of the lips. sometimes the forehead and cheeks.

Perioral (perioral) rosaceous dermatitis

Causes lesions on the dorsum of the nose and cheeks; erythema and telangiectasias predominate, these pictures have also been called steroid rubeosis.

The application technique must be chosen appropriately, either by hydration or by occlusion.

Hydration, after bathing, has been shown to increase penetration through the stratum corneum by 4 to 5 times.

The occlusion is described as the application of a CT on the affected skin and then the hermetic cover with different covers. This treatment modality is known as occlusive, in this way, the absorption increases from 5 to 500 times more than when the occlusion is not used. It should not be for more than 12 hours. It is contraindicated in infected, intertriginous regions, face, areas with folliculitis, large areas of the skin and the use of powerful CT. It is necessary to take into account if the skin is ulcerated or not, and the extension, etc.

The necessary amount of each preparation in each application must be individualized in each patient, to which is added that it is necessary to follow the recommendations of the dermatologist [3].

The method that has gained wide acceptance has been the 'fingertip unit' (FDU). One UPD is the amount of cream or ointment that is applied, by squeezing a tube with a 5-mm opening, from the area between the distal fold overlying the last interphalangeal joint and the tip of the index finger of an adult. (Figure 2).

Figure 2: Showing the 'fingertip drive' (FPU) technique.

The amount of topical corticosteroid needed for application to the surface of the skin in an adult, using the fingertip unit on the face and neck, is 2.5 (1.25g).

The UPD weighs 0.49 g and covers 312 cm2 in the adult male, and in the adult woman it weighs 0.43 g and covers 257 cm2; however, in practice its weight is considered to be 0.5g.

Processes located in the facial region, where the skin is thin, absorption is greater, it is suggested to administer products of intermediate or moderate potency.

In the eyelids, in which the skin is also thin, the use of CT should be intermittent and not more than 14 continuous days, and contact with the eyeball or conjunctivae should be avoided.

In children, the use of low-power CT is recommended. If high-power tests are necessary, they should be referred to a specialist, who will be the one to establish the type and modality of CT to be used to maintain control of the dermatosis.

These are some of the factors to take into account when applying topical treatments, we recommend you delve into the bibliographies relevant to this topic.

In addition to those already mentioned, maxillofacial surgeons use other procedures such as corticosteroid injections in lesions of another nature that will be mentioned later, such as hemangiomas and keloids [3].

Reactional dermatoses

Contact Dermatitis (Contact Eczema)

Reaction syndrome caused by the application of a substance on the skin. Contact dermatitis can be acute or lichenified eczematous and chronic: it is caused by a primary irritant or by a sensitizing mechanism. It is favored by atopy, humidity and poor hygiene [3].

It is one of the most frequent dermatoses; It constitutes a large percentage of dermatological consultations, although they can go to the maxillofacial surgeon, when it is established in the facial and cervical region. It affects all races, although the black is the most resistant. It is seen in both sexes and can occur at any age.

Figure 3: Patient with contact dermatitis in the cervical region.

We must know these lesions to be able to properly guide and guide those affected, or at least know when to refer them to a dermatology specialist.

It can be caused by any substance or object that is in direct contact with the skin. The production mechanism is by primary

irritant or by sensitization; if light is involved, it can be phototoxic or photoallergic, and there is an immediate type of contact reaction [3,4].

For the diagnosis, an exhaustive questioning and physical examination must be carried out, where we will investigate the history of allergies, hygienic-dietary habits, work, if they are exposed to excessive sunlight, or to other irritants, among other aspects concerning the individuals lifestyle.

In the treatment, patients must be explained in detail about all the care they must have to avoid recurrences and/or complications. How to avoid chemical substances, exposure to sunlight or any other physical agent that can traumatize the skin. Reduce the use of cosmetics, select personal hygiene items well, etc.

Seborrheic dermatitis (Pityriasis simplex, furfuracea or capitis, seborrheic eczema, dry pityriasis and steatoid)

It is a scaly erythematous dermatosis of chronic and recurrent evolution, which affects children and adults; it can be located on the skin where there is hair, on the face and in other regions of the body.

Its cause is unknown so far, there are those who relate it to genetic, hormonal, dietary, environmental alterations, etc.

For our specialty it is important to detect it and know how to explain to the patient that when it is located in the vicinity of where a surgical procedure is going to be performed, the evolution could not be the best. Mainly in the areas of the nasolabial fold and cheeks, when it is distributed in the form of a butterfly rise (Figure 4).

Figure 4: Female patient with seborrheic dermatitis in the form of butterfly wings.

It can also affect the beard and mustache areas in the case of men. Evidenced as a diffuse erythema, with scales and sometimes with follicular pustules.

Among the risks that these patients may be exposed to is infection of the entire area, which can be bacterial or fungal. It is necessary to be exhaustive in the complementary studies because they can be related with diabetes, arterial hypertension, lymphomas, atopic dermatitis, acne, psoriasis, rosacea, nummular dermatitis and dyshidrosis and in the case of children they can be serious.

Treatment should be discussed with dermatology specialists, explaining to the patient in the case of adults that it is a chronic process that can recur.

Drug dermatoses

Stomatologists in their daily work prescribe a large number of medications. Which can bring with them multiple reactions, whether local or systemic. Sometimes they can be resolved immediately and in others the severity of the case can be high, endangering the life of the patient.

Pharmacodermias, drug eruptions, adverse reactions to a given drug. It is considered that any compound can generate any type of reaction. The pathogenic mechanism of most skin reactions is unknown or poorly understood; may or may not be immune.

Manifestations in skin, mucous membranes or annexes, produced by drugs administered by any route, except the skin; many compounds can produce the same type of lesions, and only one several types of reaction in different individuals or in the same one, at different times [3,4].

Immune mechanisms

They occur in a very low percentage; they are determined by the molecular characteristics of the drug and host or environmental factors There are four types of reactions (Gell and Coombs)

- Type I, anaphylactic, or IgE-dependent reaction: May be immediate and is frequently caused by penicillin; the manifestations can be from a itching, urticaria, bronchospasm up to laryngeal edema.
- Type II or cytotoxic reaction: IgG and IgM antibodies participate that destroy cells and can cause hemolytic anemia due to penicillin and thrombocytopenia due to quinidine, among other examples.
- Type III reaction or dependent on circulating immune complexes the antibodies are of the IgG or IgM type; fever, arthritis, nephritis, edema, and papular or urticarial eruptions may be present.
- Type IV reaction or delayed hypersensitivity: It is mediated by cells, occurs in 24 to 48 hours and is the mechanism of almost all exanthematic reactions [3,4].

Non-immune mechanisms

- **Excessive doses:** The manifestations are directly related to the amount of the drug, such as bleeding due to high doses of anticoagulants.
- **Intolerance:** individual phenomenon related to the patient's inability to tolerate even small doses.
- **Idiosyncrasy:** Qualitatively abnormal response, for no apparent reason; for example, hereditary methemoglobinemia

- **Accumulation or cumulative toxicity:** There is a deposit on the skin of substances, drugs or their metabolites, they occur due to prolonged treatment or exposure, for example, argyria.
- **Adverse effects:** Known and undesirable pharmacological manifestations; for example, anagen alopecia due to cytostatics.
- **Exacerbation of latent or pre-existing diseases**: For example, porphyria exacerbated by barbiturates.
- **Alterations due to ecological imbalance:** For example, oral candidiasis due to treatment with broad-spectrum antibiotics.
- **Drug interaction:** It can occur due to competition, stimulation or inhibition of enzyme systems, or interference with excretion.
- **Direct toxic effect:** It is produced by highly toxic drugs; for example, heavy metals such as mercury, gold, arsenic and thallium.
- **Jarish-Herxheimer reaction;** It is manifested by exacerbation of lesions of infectious origin; occurs by administration of a very specific drug, and is attributed to the release of substances from destroyed microorganisms or damaged tissues
- **Biotropic mechanism:** It can be caused by ecological alterations or allergic factors; for example, sulfonamide-induced erythema nodosum, which appears to be due to sensitization to drug-stimulated organisms.
- **Sanarelli-Schwartzman reaction:** It is produced by a sensitizing bacteria and a triggering compound.
- **Pharmacogenic mechanism:** It occurs through three genetically determined pathways: oxidation, hydrolysis and acetylation.
- **Non-immune activation of effector pathways:** Occurs when mediators are released from plasma cells, by activation of the complement by the direct or alternate pathway, or by alterations in the metabolism of arachidonic acid.

- **Autoimmune reaction:** It is unknown whether the antibodies are pathogenic or whether they are the result, rather than the origin, of allergic disorders [3-5]. The clinical characteristics are very varied, but can range from sudden onset, disseminated and symmetrical lesions. intense itching. bright red or violaceous erythema, sometimes fever, evolution by outbreaks that appear with the same location, spontaneous disappearance in a short time, history of self-medication, and relationship of the dermatosis with the consumption of the drug.

Among other examples of these lesions is the fixed pigmented erythema, which is often closely related to the consumption of non-steroidal anti-inflammatory drugs. And morbilliform eruptions, mainly related to antibiotics.

Depending on the characteristics of the condition, this will be the therapy established, which can range from drug suspension to prescription of antihistamines, sometimes evaluation by the allergy service and in severe cases with the intensive care specialist.

Stevens-Johnson syndrome

(Erosive ectodermosis pluriorificialis, polymorphous erythema major) [3-5].

Severe, often fatal, acute dermatosis characterized by malaise, stomatitis, purulent conjunctivitis, and hemorrhagic vesicular bullous lesions scattered over the entire body surface; It is triggered by viral or bacterial infections, and mainly by medications (Figure 5).

Figure 5: Male patient with Stevens-Johnson Syndrome caused by drugs.

It constitutes a hypersensitivity syndrome produced by an antigen-antibody type reaction, with deposition of immune complexes that causes necrosis of the mucosal skin epithelia. Causes include drugs, but also chemicals, herpes simplex viral infections, bacterial infections, and unknown agents.

The incubation period can range from seven days to 28, beginning with hyperthermia, general malaise, ulcers in the oral cavity and oropharynx, odynophagia, sialorrhea, arthralgia, respiratory disorders, epistaxis. Rapid pulse. Affection of all the mucous membranes of the body. It can cause severe damage in the ophthalmological sphere.

In a short time, a dermatosis with a tendency to generalize appears on the skin, which predominates on the face, trunk, hands, feet and testicles or vaginal mucosa, consisting of a vesicular blistering eruption that is sometimes hemorrhagic that causes erosions and meliceric crusts; there are also papules and purpuric and petechial lesions (Figure 6 and 7).

In patients there may be seizures, arrhythmias, pericarditis, myositis, liver disease, and septicemia, leading to coma and death. Therefore, one must be cautious when prescribing a medication, whatever it may be, first knowing everything about the patient well and also mastering the principles of medication selection. Therefore, we recommend you to delve into this topic.

Figure 6: Lesions throughout the thorax and oral cavity due to Stevens Jhonson Syndrome.

Figure 7: Lesions on the soles of the feet and testicles, due to Stevens Johnson syndrome.

The treatment is fundamentally symptomatic, and must be in a multidisciplinary team for a better evolution of the patient.

In the case of patients who use total dentures, they should be instructed to remove it because this accessory can continue to traumatize the oral tissues for a long time with the risk of suffering malignant transformations (Figure 8).

Figure 8: Injury to the dorsal aspect of the tongue as a result of the continuous trauma of the upper total prosthesis, after suffering Steven Johnson syndrome. Courtesy of Dr. Lilian Taset Corría.

Toxic epidermal necrolysis.

(Lyell or Brocq-Lyell syndrome, large burn syndrome, acute disseminated epidermal necrosis type 3)

It constitutes a serious dermatosis (see image 9 and 10) due to drug-induced hypersensitivity, and rarely due to infections. It presents with general symptoms and extensive skin detachment, due to epidermal necrosis that leaves it denuded, producing an imbalance of fluids and electrolytes, and can lead to death if they affect more than 60 percent of the body surface [3-6].

Figure 9: Patient with toxic epidermal necrolysis due to drug reaction. Courtesy of Dr. Lilian Taset Corría.

Figure 10: Patient with toxic epidermal necrolysis due to drug reaction. Back and genital injuries. Courtesy of Dr. Lilian Taset Corría.

It is very rare, and in our case the procedure to follow is to refer the patient to an intensive care room.

Circumscribed neurodermatitis

(Lichen simplex chronicus of Vidal, jiotes, lichen simplex)

Dermatological reaction that appears in its highest percentage in the region of the neck, patients come to consultation worried about itching in that area, and the color changes they suffer in it. Fundamentally in the female sex from the third decade of life.

It is closely related to psychological factors. We must instruct the patient to avoid excess solar radiation and stress, protective creams and to consult a specialist in dermatology. insect prurigo

(Cimiciasis, arrival prurigo, strofulus, apodemic prurigo, papular urticaria, lichen urticatus)

It is common for children to come to the clinic with their parents worried about presenting one or several lesions due to a reaction to insect bites (See image 11.). Said lesions are papules, wheals and hematic crusts in the facial region, or any other part of the body; it is very itchy. It is caused by ants, mosquitoes, bedbugs and, less frequently, other ectoparasites [3-6].

The sting causes both an early and late hypersensitivity reaction. The first is caused by IgE and histamine, which generate

transient vasomotor edema of the dermis, which is manifested by a wheal; the second depends on T lymphocytes, which produce a decisive lymphohistiocytic infiltrate, and is manifested by papules. It is believed that not all injuries are the direct effect of the sting, but that they are produced by a desensitization phenomenon that causes distant injuries [3-6].

Sometimes they get infected, which is when they most often seek medical help. The cause of the process should be explained in detail to the parents, if there is no infection, then it is recommended to maintain adequate hygiene in the area and, if necessary, a small application of an anti-inflammatory cream can be indicated, and even Prescribe an antihistamine.

Figure 11: Mosquito bite.

If, as stated, the area is infected, then some antibiotic cream is indicated. In cases of persistence of lesions or worsening, we recommend interconsulting with the specialty of pediatric dermatology and/or pediatrics.

Tick prurigo

Ticks are arachnids with a chitinous structure that adhere firmly through toothed chelicerae that lacerate the epidermis and open it. They can transmit viruses, spirochetes and bacteria. They occasionally affect humans in rural areas. They generate a local foreign body reaction, and a generalized reaction due to hypersensitivity to the substances they inject. In children they affect the head and neck regions.

Lesions may heal in three to four weeks or persist for months.

The treatment is based on removing the insect from where it is, without leaving any fragment. Sometimes if this alteration is suspected, but the causal agent is not evident, it is important to work as a team with the otorhinolaryngologists so that they can examine the otological area.

Actinic prurigo.

(solar prurigo, solar dermatitis, actinic dermatitis)

Dermatological lesions due to excessive exposure to solar radiation. Which is of chronic and polymorphous evolution.

It usually begins before 10 years of age. It is spread to the forehead, cheeks, dorsum of the nose, pinnae. It can also affect the labial semimucosa, the conjunctival, among other body regions.

Patients complain of intense itching, which can sometimes cause a trauma that is evidenced by alopecia in the tail of the eyebrows.

The great importance of reducing exposure to the sun, using umbrellas, hats, and protective creams should be explained to those affected and their families. Discuss the risk of the appearance of basal cell carcinomas in white-skinned people.

In the event that the patient presents multiple lesions in other regions of the body, it must be assessed by the dermatology service [3-6].

Lesions with dyschromia.

Universal albinism

(Oculocutaneous Albinism)

Autosomal recessive genodermatosis characterized by lack of pigmentation in the skin, hair and eyes. It affects all races and both sexes.

Inheritance is autosomal recessive. There is an alteration of the gene that codes for tyrosinase and, therefore, a failure in the conversion of tyrosine into melanin. The number of melanocytes is normal, but the melanin content is reduced, there is an alteration in enzymes in the melanosomes, in the organelles that produce melanin, or in the maturation of melanosomes or the distribution of melanocytes.

Because patients do not have any pigment, they are exposed to multiple injuries, such as erythema and hyperkeratosis, photophobia, nystagmus, blepharoconjunctivitis, decreased visual acuity, and macular hypoplasia.

Very young people can develop solar elastosis, precancerous lesions or epitheliomas, from exposure to sunlight. Some patients have deafness, mental retardation, cataracts, infections, and pseudohemophilia. Life expectancy is low.

They can develop Hermansky-Pudlak syndrome is autosomal recessive, and is characterized by the triad: vitiligo, hemorrhage due to platelet aggregation defects, and Ceroid deposits in the reticuloendothelial system.

The professional must explain precisely the risks to which these patients may be subjected in any surgical intervention, such as: infection of the wounds, dehiscences, in the case of those who present the aforementioned syndrome they can hemorrhage.

They should be advised to avoid exposure to sunlight by all means, due to the risk of forming a malignant lesion on the skin. Wear dark glasses to protect the eyes. And make clear the preponderant role of family support for proper incorporation into society.

Vitiligo

(Idiopathic Acquired Leukoderma)

Very frequent, chronic and asymptomatic disease, characterized by hypochromic and chronic spots, generally without systemic alterations, genetic, neurological, autoimmune and psychological factors intervene. His cure is unpredictable.

These lesions are very common internationally, can occur in any race and sex, although it predominates in women. The spots can appear in the facial region and affect the oral mucosa, among other parts of the body.

Figure 12: Patient diagnosed with vitiligo with lesions on the lip mucosa. Courtesy of Dr. Otto Alemán Miranda.

Stomatologists should be interested in learning about this disease, because, although its etiology is unknown, it is It is related to genetic, immunological, neurological changes, and other conditions such as diabetes mellitus, pernicious anemia, Addison's disease and thyroid disorders.

So when paying attention to these patients we must study them well, to avoid any complications.

In addition, add that there are psychological studies that show that some patients may present psychosexual inhibition, hysteria, hostility, anxiety neurosis, difficulty establishing good family relationships, and introversion, important parameters to take into account to establish an adequate doctor-patient relationship. Since the patient's behavior towards the treatment, as well as their expectations are very important for the success of the treatment.

Vitiligo care as such is the responsibility of the specialist in dermatology.

Addison's disease.

A disease that occurs when the adrenal glands do not produce enough hormones (cortisol and aldosterone)

It can be a multifactorial cause, for example, we mention some of the causes

- Immune: the immune system attacks the gland.
- Tuberculosis.
- Intraglandular hemorrhage: product of the consumption of anticoagulants.
- Post-surgical complication.
- Congenital factors.
- Genetics.
- Virus.
- Mycoses: blastomycosis, histoplasmosis, coccidiomycosis.
- Metastasis.
- Lymphomas.
- Kaposi's sarcoma.
- Radiation
- Prolonged treatment with corticosteroids.
- **Chronic diseases:** sarcoidosis, hemochromatosis, amyloidosis, adrenoleukodystrophy, adrenomyelodystrophy [6,7].

By observing all these diseases, they can have an idea of all the risks to which these patients may be exposed, so we must be very careful when giving them dental care.

Keep in mind that they can present with Addison's disease based on an autoimmune condition related to type I diabetes, pernicious anemia, hypoparathyroidism, hypopituitarism, gonadal failure, hyperthyroidism, hypothyroidism, myasthenia gravis, etc.

Which makes them high-risk surgical patients. Without carrying out any intervention, the disease itself has multiple complications, among which is the Addisonian crisis, whose symptoms are based on intense abdominal pain, back pain, and pain in the legs, fainting, semi-comatose state, severe dehydration, severe arterial hypotension, nausea, diarrhoea, severe vomiting, hypoglycaemia, generalized muscle weakness.

From the dental point of view, the question we must ask ourselves is twofold; on the one hand, stress control before dental procedures. And on the other, when we have adrenal suppression and to what degree, to apply the most convenient replacement therapy before performing dental treatment [6,7].

We can basically divide stress into two types; neurogenic (follows nerve pathways) and systemic stress (reaches the hypothalamus via the circulatory system). Fear of dental treatment is an activator of systemic stress, so controlling the patient's anxiety will be a fundamental element in the management of this type of patient. Neurogenic stress will be blocked with local anesthetics, but we must not forget that the pain returns after the anesthetic is removed. Therefore, we must also pay special attention to postoperative pain, since the greatest stimulus for cortisol secretion during surgery is the reversal of anesthesia.

Oral surgery is going to be one of the procedures in dentistry that is going to cause the most postoperative pain. This pain is due, above all, to the tissue injury produced and the concomitant inflammatory reaction.

For this reason, the use of steroid drugs when required in the postoperative period is necessary to avoid an Addisonian crisis and convenient in terms of the etiological treatment of pain, since the painful stimulus is produced in part by the adjacent inflammation [6,7].

The general courses of action would be to always use long-acting anesthetics, treat patients in the morning, use mild sedatives for apprehensive or fearful patients, control the degree of facial osteoporosis to prevent iatrogenic fractures in patients with a long history of continuous corticosteroid therapy, and treat postoperative pain. We must also consider the possible interactions with other drugs that the patient may be taking.

In this way, when an Addisonian crisis occurs in the consultation, the first thing we must do is interrupt the dental procedure and place the patient in supine position, simultaneously establishing communication with an emergency service.

Until arrival at the hospital, the patient should be administered oxygen with an approximate flow of 5-10 liters / min. We must also be careful when administering glucocorticoids, differentiating whether we are dealing with a patient with known chronic adrenal insufficiency, or it has suddenly appeared and we have recognized an Addisonian crisis in a patient in whom we were not aware of the existence of adrenal insufficiency. In the first case, 100 mg of hydrocortisone sodium succinate are administered and then every 6 or 8 hours intravenously or intramuscularly.

In the second option, we will carry out all the previous support measures and wait for medical help, without administering any corticosteroid to the patient. In these cases, the doctor usually administers dexamethasone phosphate 4mg intravenously (iv). / 6-8 h while waiting for the ACTH stimulation test [6-8].

In the event that the patient is unconscious, we will place him in a supine position with his legs elevated and we will communicate the situation to the emergency service so that the patient can be transferred to a hospital.

Then, before 4 minutes have passed, we will begin basic life support depending on the patient's situation. If an adrenal cause is suspected, we will give 100 mg of hydrocortisone intravascularly or intramuscularly (im), in 30 seconds if possible. Subsequently, after 2 hours, another 100 mg of hydrocortisone dissolved in intravenous or intramuscular serum will be given [6-9].

The best way to care for these patients is with prevention, it is essential to carry out an adequate interrogation, physical examination, always rely on complementary tests, etc.

Melasma

(chloasma, cloth, gravidarum mask)

Acquired melanosis of chronic and asymptomatic evolution, circumscribed on the face, of unknown origin and that is exacerbated by exposure to sunlight, pregnancy, hormonal contraceptives and the use of certain cosmetics [7-10].

It can appear in any race or sex, although it predominates in pregnant women. It occurs mainly in malar and mandibular regions. Although it can be located symmetrically on the forehead, cheeks, dorsum of the nose, upper lip and sometimes the neck. There are hyperchromic brown spots, of different intensity, with regular or irregular distribution of the pigment, sometimes confluent and with imprecise limits.

From the stomatological point of view, no risk has been addressed, but recommending patients to take care of ultraviolet radiation [10-14].

Argyria.

(argyrosis)

Pigmentary changes produced by exposure to silver salts or to the colloidal protein of this metal; It is characterized by gray-blue spots on the skin, mucous membranes and annexes.

The distribution is worldwide, with no predilection for sex or age. It predominates in those who use silver in industrial tasks without adequate protective equipment.

It is due to direct contact with silver salts or its colloidal protein, due to medical or industrial exposure. It penetrates through the skin, digestive or respiratory route. Silver is found in local antiseptics such as silver nitrate and sulfadiazine, nasal drops, dental and photographic material, absorbable sutures, powders used in goldsmithing, etc [10-14].

The local form mainly affects the face, neck, forearms, and hands; there is uniform grayish blue pigmentation that gives the impression of a "resurrected" is more noticeable in parts exposed to sunlight, which intensifies it. The pigmentation is indelible, which explains the colloquial name "blue person".

There is no effective treatment so far, the best is prevention. Professionals who work in the preparation of stomatological utensils and/or medications must properly use the means of protection.

Conclusion

The main complications and risks of dermatological conditions in the buccomaxillofacial complex, as well as their sequelae, were described. Based on an exhaustive review of the literature, as well as on the author's previous experience. These injuries have a high rate of morbidity at the international level, and cause multiple physical, mental and social conditions.

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