Shock anafilactico diagnostico pdf

DEFINITION AND ETIOPATOGENIA Above Anaphylaxis is a severe hypersensitivity (allergic or non-allergic) reaction, widespread or systemic, which can be life-threatening. The hypersensitivity response includes symptoms and signs caused by exposure to a certain stimulus in a dose tolerable by healthy people. Anaphylactic shock is a severe, rapidly progressing anaphylactic reaction (anaphylaxis), in which there is a life-threatening drop in blood pressure. The main causes of anaphylaxis: 1) allergic: a) medications: most often β lactam, mionrelaxation, cytostatic, barbiturate, opioid, NSAIDs (may cause allergic and non-allergic reactions; especially AAS and ibuprofen) b) products: adults are most commonly fish, shellfish, peanuts, citrus, cow's milk proteins, chicken egg and mammalian meat c) ved → hypmopter (especially common in Chile). 24.22.2 d) parenterally injected proteins: blood, blood components and blood derivatives, hormones (e.g. insulin), enzymes (e.g. streptocockinase), serum (e.g. antitension), allergen drugs used in diagnosis in vivo and immunotherapy e) inhaled allergens, aerosol food particles, pollen or animal perch, such as horse hair f) latex 2) have no allergies. : opioids, muscle relaxants, colloidal solutions (e.g. dextran, hydroxyethyl starch, human albumin solution) or hypertensive (e.g. mannitol), physical activity (b) immune complexes: blood, blood components and blood derivatives, immunoglobulins, animal serums and vaccines, membranes used in dialysis (c) changes in the metabolism of arachidonic acid: hypersensitivity to AAS and other anti-inflammatory drugs (NSAIDs), tyramin, insufficient activity of enzymes that break down anaphylactical mediators and other agents : radiological contrast media, contaminated food and preservatives. Risk factors for anaphylaxis include: previous history of anaphylaxis and re-exposure to the factor that caused it (β-lactam, hymenopter poison, radiological contrast media), age (reactions occur most often in adults), female gender (more common in women and has a heavier course), atopia, the place of allergen in the body (after the introduction of parenteral antigen, especially mastocytosis, chronic diseases (e.g. cardiovascular diseases, poorly controlled asthma), enzyme deficiency (especially enzymes, which assimilate anaphylaxis of intermediaries), betrayergenic effects (risk of severe anaphylaxis is higher in case of episodic exposure than permanent exposure, simultaneous exposure to parenteral allergen and is present in the environment: for example, during immunotherapy during , medical procedures (e.g., use of diagnostics, vivo tests, provocative tests, surgical procedures with local or general anesthesia). that in 30% of anaphylactic reactions the so-called cofactors, i.e. flattering factors, play an important role. These include exercise, alcohol consumption, cooling, some drugs (NSAIDs) and acute infections. Since non-allergic reactions are not related to immune mechanisms, shock can occur after the first contact with the agent. The most common causes of anaphylaxis are insect drugs, food and poisons. Even in 30% of cases the cause is not established, despite a detailed study (idiopathic anaphylaxis). Anaphylaxis is sometimes caused only by the coexistence of 2 or more factors (e.g., the allergen responsible for allergies and exercise). IgE-dependent reaction is the most common anaphylactic mechanism. Non-immunological reactions occur less frequently. Its general characteristic is degranulation of mast cells and basophils. Freed and generated mediators (histamine, tryptosis and metabolites of arachidonic acid, platelet activator factor, nitric oxide, etc.) contract smooth muscles in the bronchi and digestive tract, increase permeability, dilate blood vessels and stimulate the termination of sensory nerves. In addition, they activate inflammatory cells, supplementation system, coagulation and fibrillation system and act as chemotherapy on eosinophils, which enhances and lengthens anaphylactic response. Increased vascular permeability and rapid transfer of fluids to the indecifiable space can result in the loss of up to 35% of the effective volume of circulating blood in 10 minutes. CLINICAL TABLE AND NATURAL HISTORY Up Symptoms of anaphylaxis can be mild, moderate or very severe when on impact and most often occur within seconds up to a few minutes after contact with the causal agent (sometimes up to several hours) : 1 skin and skin : hives or vasomotor swelling, skin redness 2) system swelling of the upper respiratory tract, hoarseness, strider, cough, wheezing, shortness of breath, rhinitis 3) of the digestive tract: nausea, vomiting, abdominal pain, diarrhea 4) systemic reaction: hypotension and other manifestations of shock →cap. 2.2, up to 30%; they may appear at the same time as other manifestations of anaphylaxis or, most often, appear some time after 5) less often: dizziness or headache, contraction of the uterus, a sense of danger. Initially, mild symptoms (e.g. skin-limited and subcutaneous) can progress rapidly and be life-threatening if proper treatment is not initiated immediately. Late or biphasic reactions can also be detected, the manifestations of which progress or increase after 8-12 hours Anaphylactic symptoms can last up to several days, despite appropriate treatment, especially if the cause agent is a food allergen. Symptoms of anaphylactic shock (regardless of the cause): cold, pale and snushore skin, collapse of subcutaneous veins, hypotension, tachycardia, oliguria or anuria, involuntary defecation and loss of consciousness. Cardiac arrest can occur. DIAGNOSTICS Above It is based on typical symptoms and traits and a close temporal relationship between trigger and development of manifestations. Diagnostic anaphylaxis criteria according to WAO → 1-1. The faster symptoms develop, the higher the risk of a serious, life-threatening anaphylactic reaction. The definition of tryptose, histamine or methylhisamine is not a publicly available test and does not matter in practice. The guides recommend that tryptosis be identified as the only test available for diagnosis. A blood sample should be taken within the first 60-90 minutes. This indicates the activation of mast cells/basophilic zgt;11.4 ng/ml. It has a high specificity but low sensitivity. This can be helpful in the face of lawsuits. ≥4 weeks after an episode of anaphylaxis the reason must be confirmed: a specific igE definition can be helpful. Provocative tests should be conducted under medical supervision and with resources to treat adverse events. In practice, it is important to distinguish anaphylaxis from more common vasovagal syncops. In syncope the skin is usually cold and pale, but there are no hives, swelling, itching, bronchial obstruction or nausea, and instead of tachycardia there is bradycardia. TREATMENT Up 1. Immediately stop exposure to a substance suspected of causing an allergic reaction (e.g., discontinuation of a drug, transfusion of a blood component or derivatives 2. Ask for help. 3. Assess airway permeability, breathing, circulation and state of consciousness. If necessary, to ensure the permeability of the airways and in the case of respiratory or circulatory failure to initiate resuscitation →cap. 2.1. If a stridor or severe facial and upper respiratory swelling (lingual swelling, oral mucosa and pharyng, oxilation) occur to consider endotracheal incubation →cap. 25.19.1. Delay in in zeroing can make it difficult to achieve and a failed intubation test can exacerbate swelling. In the case of swelling, which threatens the permeability of the airways and the impossibility of endotracheal inctubation, crychothrotomy should be performed →cap. 25.19.5. 4. Administer adrenaline 1) In patients with anaphylactic reaction in history, which carry with them adrenaline-filled injector or autoincector (pencil, pen), immediately inject 1 dose of im adrenaline in the side of the thigh, even if the symptoms are only mild (no contraindications for adrenaline in this situation, and the faster it is administered, the faster the effectiveness of treatment). 2) In adult patients who support spontaneous circulation, injected 0.3 mg (autoincector or injector 0.3 mg or 0.5 mg) in the side of the thigh (solution 1 mg/ml 0.1%, 1:1000)); children have 0.01 mg/kg, autoinjector 0.15 mg in children 7.5-25 kg, 0.3 mg in children zgt;25 kg). The dose can be repeated every 5-15 minutes in case of no improvement or if the blood pressure is still too low (in most patients the improvement of the general condition is achieved after 1-2 doses). Also administered in case of doubt if it is anaphylactic shock, as its effectiveness is higher when the introduction occurs immediately after the onset of symptoms. Do not administer VSc. 5. Placing the patient in the dorsal decubbitum with raised legs, which helps in the treatment of hypotension, but is not recommended in patients with breathing disorders, women in advanced pregnancy (should be placed on the left side) and in patients who vomit. 6. Administering oxygen through a face mask (usually 6-8 l/min); indications: respiratory failure, long-term anaphylaxis (requiring the introduction of several doses of adrenaline), chronic respiratory diseases (asthma, COPD), chronic diseases of the cardiovascular system (e.g. coronary heart disease), manifestations of recent myocardial ischemia, patients receiving short-period inhalation β mymetics. 7. Provide access to peripheral veins with large diameter cannula ≥1.8 mm (≤ 16 G)) and use quick injection kits. 8. Pour fluid iv.: patients with a significant reduction in blood pressure and lack of reaction to them adrenaline pour 1-2 liters naCl up to 0.9% as quickly as possible (5-10 ml/kg for the first 5-10 minutes in adults and 10 ml/kg in children). Some patients require transfusion of large volumes of liquids (e.g. 4-8 liters) and in these cases balanced crystaloids (and/or colloids) are used. Do not use glucose or hydroxyethyl starch (HES) solutions. The use of colloidal solutions is equally effective than crystaloid solutions, but it is more expensive. 9. Monitoring of blood pressure and, depending on the patient's condition, ECG, pulse of oxymetry or arterial blood gas. 10. A patient with severe respiratory swelling, bronchial spasm or reduced blood pressure has unanswered multiple adrenaline injections and fluid iv transfusions. → should consider using adrenaline 0.1-0.3 mg in 10 ml NaCl at 0.9% with iv injections. within a few minutes or in continuous infusion of iv. 1-10 g/min (1 mg solution per 10 ml NaCl at 0.9% 0.1 mg/ml, 1:10,000). Monitoring the use of ECG because this procedure carries a high risk of arrhythmia. In patients β blockers, adrenaline is often ineffective, and in this case the main thing - to inject iv fluids. and consider administering glucagon iv. (→ ahead). 11. Additional interventions 1) Antihistamines: in anaphylaxis H1 blockers reduce skin itching, the appearance of hive blisters and the intensity of angioedema; they also help in the treatment of nasal and eye symptoms. Do not use them instead of adrenaline, as they act more slowly and of course have not been shown to affect the course of airway obstruction, lower blood pressure or the onset of anaphylactic shock. Use them as an additional treatment after the introduction of basic treatment. Administer the H1 blocker in slow iv injection. (Clemastin 2 mg or antazolin 200 mg in 10 ml NaCl at 0.9%, in Chile exist only in ointment, but chlorphenamine iv. is available in vials 10 mg per 1 ml). In the case of hypotension, consider administering the H2 blocker iv. (50 mg of ranitidine every 8-12 hours or 150 mg 2 × g). 2) Administer bronchodlian if bronchial spasm does not give way after adrenaline administration: short-β-mimetic in fog (e.g. salbutamol 2.5 or 5 mg in 3 ml naCl at 0.9%) Or an inhaler. If necessary, inhalations can be do not use β instead of adrenaline, as they do not prevent or reduce obstruction of the upper respiratory tract (e.g. swelling of the larynx). 3) Patients with systolic blood pressure have a blood pressure of 90 mmHg. , despite the introduction of ADRENALINe IM and infusion of fluids to consider the use of → vasoconstricting drugs (norepinephrine or dopamine (the latter in patients with a slow pulse) in continuous infusion iv. (dose of →cap. 2.2, Treatment). 4) In patients, β blockers and do not respond to adrenaline treatment → consider introducing glucagon in slow iv infusion. 1-5 mg for 5 minutes and then in continuous infusion of iv. 5-15 g/min, depending on the clinical response. Common side effects include nausea, vomiting and hyperglycemia. 5) The use of glucocorticoids is not useful for the treatment of the acute phase of anaphylactic shock, but can prevent the late phase of anaphylaxis. Do not use glucocorticoids instead of adrenaline as a first-line drug. Administer for a maximum of 3 days iv. (e.g., methylprednisolone 1-2 mg/kg, then 1 mg/kg/d, or hydrocortisone 200-400 mg, then 100 mg every 6 hours) or VO. 6) Contact the patient in the IIT if the anaphylactic reaction does not give way, despite treatment. 12. Observation after symptom remission 1) Patient observation for 8-24 hours due to the risk of late stage anaphylactic reaction or long-term anaphylaxis. Watch for 24 hours especially in patients with severe anaphylaxis of unknown etiology, with slow onset of symptoms, in patients with severe asthma or with severe bronchospasm, if there is a possibility of continuous exposure to the allergen and in patients with a history of biphase reaction. 2) Patients who do not have symptoms of anaphylaxis 8 hours after treatment may be discharged. Warn about the possibility of recurrence of symptoms and instruct on the ways to do in such cases. Prescribe a pre-filled syringe with adrenaline, which should always sing to patients. The VO H1 blocker can also be prescribed (for example. Clemastin in 1 mg tablets; recommend a single intake of 2 tablets; in Chile exists only in ointment, but chlorphenamine iv. is available in vials 10 mg in 1 ml) and vo glucocorticoid (prednione in 20 mg tablets; recommend a single intake of 2-3 tablets) indicating its use after adrenaline injection (if the patient can get oral medications). 3) Send the patient for a consultation on allergy to determine the cause of anaphylaxis, methods of its prevention and the plan of subsequent → more above). In the case of a reaction to bites or bees, after confirming the poison allergy of these insects, the patient must be qualified for specific immunotherapy. PREVENTION Up In patients with suspected anaphylaxis or with an episode of anaphylaxis confirmed in history, establish whether it was actually an anaphylactic reaction, as well as establish its cause. Tests should be done no earlier than 4 weeks after the anaphylaxis episode. The management algorithm in case of suspicion of anaphylaxis in the history of → fig. 1-1. Primary Prevention 1. Precautions to reduce the risk of anaphylactic shock 1) When administering medications: if possible administer VO medications, not parenterally. The anamnesis always question allergies, especially before the introduction of iv medications. Do not underestimate the records of other doctors or the patient's opinion about the increased sensitivity to the drug. Use the recommended method of testing and administering a drug that can cause anaphylactic reactions. Injection IM or VSc make sure the needle is not in the blood vessels. Monitor the patient for 30-60 minutes after administering the medication, which may cause anaphylaxis. (2) In the case of vaccines and serum administration: (a) antiviral vaccines: interrogate in anamnesis about the hypersensitivity of the protein chicken egg b) antitoxins (e.g. tetanus, anti-diphtheria, anti-bor, against venom vipers): introduce human serums. When this is not possible and there is a suspicion of allergies, inject animal serum after the use of antihistamines and glucocorticoids VO or iv. (3) In allergological diagnosis: performing on the spot rather than intradermal tests; do not perform skin tests in the pollen season in patients with pollen allergies. Perform provocative tests with oral or inhaled medications in the hospital media. In patients with anaphylaxis it is better to define serum-specific IgE than to perform skin tests. 2. Provide medical procedures associated with an increased risk of anaphylaxis (e.g., specific immunotherapy, especially insect poisons, introduction of biological drugs iv., radiological examinations with contrast media, provocative tests with medicines and food). 1) Equipment and medicine: phonendoscope and blood pressure monitor; turnstiles, syringes, needles, vascular cannulas 14 G or 16 G; adrenaline for injections (1 mg/ml); oxygen-therapeutic equipment →cap. 25.21; Tube and face-to-face vent; NaCl at 0.9% (500 ml in bottles or bags) and iv liquid infusion equipment. antihistamines for iv administration. (Clemastin or anthasolin, in Chile exist only in ointment, but is available iv. in vials 10 mg per 1 ml), glucocorticoids for iv administration. (e.g., methylprednisolone, hydrocortisone); Nebulizer β-mymetic for fog (e.g. salbutamol). 2) The risk associated with the introduction of allergens, drugs or diagnostics can be minimized with previously introduced VO or iv. antihistamine and/or glucocorticoid (e.g., 50 mg of PREDNion VO 12, 7 and 1 h before administering a drug or diagnostic environment that can cause anaphylaxis). Secondary preventive action in people with anaphylactic shock. The use of these methods requires proper patient training. 1. If identified, eliminate the consumption of triggers (drugs, food) and avoid behaviors that pose such a risk (insects). 2. If possible, to carry out medical desensitization (e.g., specific immunotherapy in patients with an allergy to hymenopter poison or drug-specific desensitization) or to develop tolerance (in the case of hypersensitivity of the drug, for example, AAS, chemotherapy, monoclonal antibodies, antibiotics). 3. Always carry with you a pre-filled syringe or adrenaline auto-injector (sets with 2 auto-injectors with standard doses of adrenaline available) for self chat, H1 VO blocker and VO glucocorticoid →ooh above. Absolute indicators for prescribing adrenaline for self-administration (pre-filled syringe or autoinjector): 1) pre-secret anaphylaxis, hymenopter insect poisons (also during immunotherapy), latex, latex, allergens in the air caused by exercise or idiopathic 2) coexistence of food allergies and poorly controlled asthma or mild/severe asthma 3) syndromes basophil activation Relative signs: 1) mild or moderate reaction to peanuts or nuts (except oral allergy syndrome (ODS) 2) food allergies in children (except ODS) 3) significant distance between housing and medical point, and a mild or moderate preliminary reaction to food, insect venom, latex 4) a mild or moderate reaction to a very small amount of food (except DHS). 4. Wear relevant medical information along with an identity card or bracelet. 5. Pharmacological prevention: continuous introduction of antihistamines in patients with frequent episodes of idiopathic anaphylaxis or timely administration of glucocorticoid (VO or iv.) and antihistamine prior to contact with the trigger factor (e.g., before radiological examination with contrast →s high). Controversial use because it gives false Security. It has been shown to reduce the incidence of mild immediate response. It is ineffective in anaphylaxis after effort. Remember that using these methods requires proper instructions for patients. TABLE AND CITYARribe Table 1-1. WAO Anaphylaxis Diagnostic Criteria Probability of Anaphylaxis Is High, if ≥1 of the following criteria is met: 1) sudden onset of symptoms (within a few minutes or hours) on the skin and/or mucous membrane (e.g., generalized hives, itching or redness, lips, lintval and urglic swelling) and ≥1 of the following: a) respiratory disorders (shortness of breath, bronchodage, decreased PEF, hypoxemia) b) decreased blood pressure or symptoms indicating organ failure (e.g. hypotension, syncop, uncontrolled urination/evacuation) 2) ≥2 of the following manifestations that occur shortly after exposure to the suspected allergen (in some cases within minutes or hours): (a) changes in the skin and mucosa (e.g.). , itching and redness, lips, lintwood and tumul swelling) b) respiratory disorders (e.g. shortness of breath, wheezing bronchospasm, strider, decreased PEF, hypoxemia) c) reduced blood pressure or symptoms, indicating organ failure (e.g. hypotension, syncope, uncontrolled urination/evacuation) d) gastrointestinal disorders (e.g. colic abdominal pain, vomiting) 3) decreased blood pressure after exposure to known allergen (within minutes or hours): a) newborns and children: low systolic blood pressure (for this age group) or reduced blood pressure of siss zgt;30%c in relation to the original value (b) of adults: systolic blood pressure 30% in relation to the original zlt;90 mm q o disminuci'n de la presi'n sist'lica en.gt. to U another factor, for example, the activation of independent or non-immunological IgE immunological mast cells (direct). , lowering blood pressure may be the only manifestation of anaphylaxis. A similar situation with the appearance of generalized hives after the introduction of a consistent dose of allergenic immunotherapy. c) низкое систолическое кровяное давление у детей определяется как: <70 mm= hg= en= niños= entre= 1 mes= y 1= año;=></70> <(70 mm= hg= += [2= ×= edad])= entre= 1-10= años;=></(70> <90 mm= hg= entre= 11-17= años.= el= pulso= normal= se= encuentra= en= el= intervalo= 80-140/min= en= niños= en= edad= de= 1-2= años,= 80-120= a los= 3 años= y 70-115/min=>3 года. У новорожденных, нарушения дыхания, скорее всего, происходят, чем гипотония или шок; в этой возрастной группе шок</90> </90>manifests itself more often initially with tachycardia than with hypotension. From: The World Allergy Authority. J., 2011; 4: 13-37 and World Allergy Authority. J., 2015; 8: 32. Fig. 1-1. Algorithm of action in case of suspected anaphylaxis anaphylaxis of anaphylaxis shock anafilactico diagnostico de enfermeria. shock anafilactico diagnostico diferencial. diagnostico del shock anafilactico. diagnostico diferencial del shock anafilactico. diagnostico de enfermeria para shock anafilactico. diagnostico de un shock anafilactico. diagnostico para shock anafilactico. diagnosticos nanda shock anafilactico