



INSTRUCTIVO PARA LLENADO

- No deben eliminarse los títulos en mayúsculas y negrita.
- Los ** solo indica la existencia de un título/sección, pero no se ve en la plataforma.
- Los ++ corresponde a la sección donde se agregan diagnósticos adicionales.
- Los ## indica secciones rellenables en la ficha (título + contenido).
- Que no se debe alterar el orden de las secciones.
- El contenido editable corresponde al texto que aparece en cursiva azul.
- Todo párrafo debe terminar con un punto.

**** TÍTULO DE LA COMPETENCIA**

MANAGING PATIENTS WITH ACUTE CHEST PAIN

**** DIAGNÓSIS / SITUACIÓN 1**

ACUTE MYOCARDIAL INFARCTION (AMI)

**** DIAGNÓSIS / SITUACIÓN 2**

NON-ST-SEGMENT ELEVATION ACUTE CORONARY SYNDROME (NSTE-ACS)

**** DIAGNÓSIS / SITUACIÓN 3**

DISSECTION OF THE THORACIC AORTA

++ OTROS DIAGNÓSTICOS/SITUACIONES...

Other possible diagnoses: pericarditis, myocardi.....

COMPETENCIES TO ACQUIRE

GENERAL.

Diagnosing and treating different causes of acute chest pain in the emergency department as part of a medical team and applying immediate measures appropriate for the diagnosis.

SPECIFIC.

Differential diagnosis between STE-ACS, NSTE-ACS, unstable angina, and dissection of the thoracic aorta.

Awareness of the severity of the situation.

Initial treatment for the syndrome and considering possible treatment for immediate complications.

Indicating relevant complementary tests and examinations.

Decision making and teamwork.

Communication among team members and with the patient.

BACKGROUND KNOWLEDGE

Etiology, symptomology, and immediate complications of acute chest pain.

Interpretation of EKG for myocardial ischemia.

Interpretation of echocardiograms, chest X-rays, and CT images.

Oxygenation, cardiopulmonary resuscitation, management of a defibrillator.

Indications for defibrillation and cardioversion.

Importance of time in decision making.

Recognizing hemodynamic instability.

Analgesia, coronary vasodilators, antihypertensives, antithrombotic drugs, antiplatelet drugs, sodium heparin, and the indications, contraindications, and complications of thrombolytics.

Indications for treatment by specialists (surgery, angioplasty).

SUGGESTIONS FOR STUDY MATERIAL

Clinical guide and algorithms.

BRIEFING

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SCENARIO

Staging a cubicle in the emergency department with a bed and manikin that allows cardiorespiratory auscultation, monitoring of EKG, SpO₂, NIBP, and IV-line placement, EKG simulator. Cart with prepared medication and oxygen therapy devices.

MOSAICO TEMPLATES

Students Should receive the different templates in the room where they design the cases (one copy for each table): Case design template, Students' template for assessing other groups, Teacher's template for assessing the competency being taught.

DIFFERENTIAL DIAGNOSES

Ami.

Nste-ac.

Dissection of the thoracic aorta.

CASE DOCUMENTS

Clinical guide EKG showing AMI Blood test including coagulation and troponin levels PA chest X-ray normal.

Clinical guide AP chest X-rays with signs of left heart failure Series of 3 EKGs Later blood test including coagulation and troponin levels.

Clinical guide EKG normal Blood test with elevated troponins AP & lateral chest X-rays showing aortic dissection CT showing aortic dissection Echocardiogram showing aortic dissection (optional).

SUPPLIES

The supplies are the same for the three cases: SimMan with venous line, defibrillator, insufflation bag, facemask, nasal prongs, external defibrillator pads, and VMK; airway material; step-stool for CPR.

Mock drugs with labels.

Nitroglycerin spray.

Pills: acetylsalicylic acid 300mg; clopidogrel 300 mg; ticagrelor: 90mg; prasugrel 60 mg; atorvastatin 80 mg; isosorbide mononitrate: 60 mg; bisoprolol 5 mg.

Loaded syringes.

Morphine 10 mg diluted in a 10 mL syringe Sodium heparin: loaded syringe 5000 IU.

Sodium heparin 50 IU/mL in IV infusion pump.

Enoxaparin.

Nitroglycerin 20 mcg mL in IV infusion pump.

Amiodarone: 300mg in 100ml saline.

Atropine: 1mg.

Adrenaline 1 mg diluted in 10 mL saline solution.

Noradrenaline 40 mg in 250 mL saline solution administered with an IV infusion pump.

Dobutamine: 1g in 250 mL saline solution administered with an IV infusion pump.

Propofol 200 mg in a 20 mL syringe; midazolam 5 mg in a 5 mL syringe.

COMPLEMENTARY TESTS

Iam.

Scasest.

Thoracic aortic dissection.

MOST COMMON ERRORS

Failure to thoroughly assess and treat pain Failure to request appropriate complementary tests Failure to reevaluate after the initial assessment Failure to treat SCAEST appropriately (heparin, triple antithrombotic therapy) Failure to detect and treat possible arrhythmias Disorganization and inadequate communication among team members and with the patient Failure to contact a cardiologist-hemodynamics specialist.

Idem de IAM Retrasar el aviso a hemodinámica.

No indicar exploración de imágenes (Rx, TAC) No contactar con cirugía precozmente Descoagular.

CONSEQUENCES OF ERRORS

Ventricular arrhythmias, cardiac arrest.

Delays can lead to death and reinfarction.

Cardiogenic shock, Non-resuscitable cardiac arrest Surgical bleeding.

TIPS

Make sure that the participants remember how to diagnose hemodynamic instability, to auscultate the lungs as well, and to use a defibrillator for cardioversion and defibrillation.

Show the participants all the scenario and the material and supplies that are available in it, especially the loaded medications.

The recommended order of acting out the cases is AMI: NSTEMI-ACS: aortic dissection.

TECHNOLOGY

The high-fidelity manikin can be replaced with a low-fidelity manikin complemented with a monitor and stethoscope connected to software that reproduces heart and/or breathing sounds.

An intercom or cell phones to connect the professor facilitating the simulation with the aide in simulation.

The MOSAICO web platform can be used in the design or other phases of the process.

EXPERT ADVICE

Make sure that the communication between the professor and the aide in the scenario works properly before starting to act out the scenes.

Make sure that the observers can see and hear everything in the scenario and receive the results of the complementary tests at the same time as the treating group.