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 TACHYARRHYTHMIAS IN THE EMERG. DEPARTMENT

** DIAGNÓSIS / SITUACIÓN 1

SUPRAVENTRICULAR TACHYCARDIA

** DIAGNÓSIS / SITUACIÓN 2

VENTRICULAR TACHYCARDIA

** DIAGNÓSIS / SITUACIÓN 3

ATRIAL FIBRILLATION

++ OTROS DIAGNÓSTICOS/SITUACIONES...

Other possible diagnoses: atrial flutter...

COMPETENCIES TO ACQUIRE

GENERAL.

Diagnosing and treating different types of arrhythmias in the emergency department as part of a medical team. Detecting hemodynamic decompensation caused by tachyarrhythmias.

SPECIFIC.

Diagnosis, decision making and teamwork to manage tachyarrhythmias in the emergency department.

Indications for pharmacological and electrical treatment.

Awareness of the severity of the situation.

Teamwork and communicating with patients.

BACKGROUND KNOWLEDGE

Interpretation of normal and pathological EKGs, especially those showing arrhythmias.

Antiarrhythmic drugs.

Concept of cardiac decompensation with low cardiac output.

Basic cardiopulmonary resuscitation.

Indications for defibrillation and cardioversion.

Handling a defibrillator.

Oxygen therapy and bag-valve-mask ventilation.

Recognizing hemodynamic instability.

SUGGESTIONS FOR STUDY MATERIAL

Clinical guide: Algorithm for CPR; Video showing how to use a defibrillator.

SCENARIO

A cubicle in the emergency department.

A high-fidelity manikin with an IV line, defibrillator, respiratory insufflation bag, facemask, nasal prongs, and VMK for administering oxygen. Airway materials; step-stool for CPR.

EKG machine.

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

Supraventricular tachycardia.

Ventricular tachycardia.

Atrial fibrillation.

CASE DOCUMENTS

Clinical guide EKG showing rapid supraventricular tachycardia Access to the information they consider necessary.

Clinical guide EKG showing ventricular tachycardia Access to the information they consider necessary.

Clinical guide EKG showing rapid atrial fibril\ation Access to the information they consider necessary.

SUPPLIES

Labeled mock drugs:

Amiodarone 150 mg in 100 ml saline: 150 mg bottle.

Digoxin: 0.5 mg diluted in a 10 ml syringe.

Diltiazem 10 mg diluted in a 10 ml syringe.

Verapamil 10 mg diluted in a 10 ml syringe.

Atropine 1 mg in a syringe.

Atenolol 5 mg in a 5 ml syringe; Adenosine 6 mg in a 5 ml syringe.

Lidocaine 100 mg diluted in a 10 ml syringe.

Adrenaline 1 mg diluted in a 10 ml syringe.

Flecainide 15 mg in a 20 ml syringe.

Heparin sc.

Propofol 200 mg in a 20 mL syringe: Midazolam 5 mg in a 5 mL syringe.

Pills: Flecainide 100 mg and Propafenone 300 mg.

COMPLEMENTARY TESTS

Normal laboratory test results.

Normal laboratory test results.

Normal laboratory test results A second EKG showing a response to treatment.

MOST COMMON ERRORS

Failure to orient the history taking.

Failure to differentiate between a stable and unstable situation.

Failure to follow changes on the monitor.

Failure to examine pulses and to auscultate.

Failure to treat hypoxemia.

Failure to indicate the appropriate drugs, dosage, and route of administration.

Failure to anticipate the effects of drugs.

Delays in cardioversion, failure to synchronize cardioversion, failure to discharge enough energy.

Failure to inform the patient, sedate the patient, and ventilate the patient during cardioversion.

Failure to sedate and ventilate the patient until they have recovered.

Failure to obtain a 12-lead EKG.

Failure to carry out carotid compression maneuvers appropriately.

Disorganization, inadequate communication, lack of leadership in the team.

CONSEQUENCES OF ERRORS

Failure to act can lead to cardiogenic shock and cardiac arrest.

Cardiac arrest due to ventricular fibrillation.

Failure to act can lead to cardiogenic shock and cardiac arrest.

TIPS

Make sure that participants remember how to use a defibrillator for cardioversion and the rationale for its use.

Show the participants all the scenario and the material and supplies that are available in it.

Devise a rotation scheme for the cases to maximize group circulation.

The recommended order of acting out the cases is Supraventricular tachycardia- Atrial fibrillation- Ventricular

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.

ANNOTATIONS