

TEST YOURSELF How to mix medicine

Structure of pamphlet

Test your own knowledge on the subject HOW TO MIX MEDICINEsolve a few assignments

Find background knowledge in "Medical Guide for Seafarers" pp 39-40 and in the videos related to the book.

Find the correct answers at the end of the pamphlet. However, test your knowledge, before you read the answers.



Stay up-dated

Find all self-training assignments at our webpage www.dma.dk

> You may ask us questions at cms@dma.dk

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DANISH MARITIME AUTHORITY

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May 2020

You may want to read pages 39-40 in "Medical Guide for Seafarers" and watch video number 8.

Assignment 1

Describe, in brief points, how to mix dry powder (antibiotic) and sterile water:

Assignment 3

What will you do, if Radio Medical Denmark prescribes the medicine from assignment 2 in a dose, which differs from the content of the vial?

Assignment 2

Do you use gloves when you mix powder (antibiotic) and water?

Please, explain your answer:





Did you know ?

With antibiotics, the medicine is sometimes kept as a dry powder separated from sterile water, as durability without the separation, would be significantly reduced.

Mixed antibiotic (7.9) has a durability of 24 hours, provided it is kept refrigerated.

The hormone (4.3) Hydrocortisonesuccinat is durable 72 hours if refrigerated.

Remember !

Always consult Radio Medical Denmark before you give medicine to a crewmember!

Always ask the patient about allergies before you administer medicine prescribed by Radio Medical Denmark.

If you administer antibiotics as injection, always have (4.1) injection Adrenaline ready. (Unopened). Wait 10 minutes after the injection. If the patient develops allergic shock, the treatment is Adrenalin.

Answers to assignments:

Assignment 1

Describe, in brief points, how to mix dry powder (antibiotic) and sterile water:

- Break the glass- ampoule (sterile water)

 use an unopened alcohol swap
 between your fingers and the glass.
- Using a needle (E.6) draw the water into a 10 ml syringe.
- Remove the top of the metal-cap from the vial with the powder and disinfect the rubber membrane.
- Puncture the membrane with the needle. In small portions, inject the water into the vial with the powder, as you let the excess air escape into the syringe.
- Keep the syringe, needle and vial attached (air in the syringe, water/powder/air in the vial.
- Mix (shake, gently) until there is no sediment and the liquid is transparent.
- Put the air back in the vial, and allow the liquid to run back into the syringe.

Assignment 3

What will you do, if Radio Medical Denmark prescribes the medicine from assignment 2 in a dose, which differs from the content of the vial?

Mix all the powder with the sterile water, Collect the mixture in the syringe. The total amount of medicine (grams) is now in the syringe – regardless of how many milliliters (ml) you have dissolved it in. Now compare grams in the vial and grams prescribed. Now calculate how large a part (how many ml) to give the patient.

If the prescription is: Give 0.5 grams of 7.9 Ceftriaxone. Then:

The vial, 7.9 Ceftriaxone, contains 1 g of powder. Mix the powder with sterile water (accompanying glass-ampoule of 10 ml). Now you should have approximately 10ml containing 1 gram of medicine.

Prescription was: 0.5 grams – you should then give half of the amount of mixed medicine (5ml).

If in doubt:

Contact Radio Medical Denmark again.

Assignment 2

Do you use gloves when you mix powder (antibiotic) and water?

Yes

Please, explain your answer:

You want to protect yourself from the antibiotic. If you spill medicine on your skin, you may have a risk of allergic reaction, or ultimately to develop resistance against the antibiotic.

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