How to Reconstitute Injectable Medication to the Appropriate Strength

Step-by-step:

- Ensure you have all the materials necessary to reconstitute the medication
  - Meropenem vial, 50 mL normal saline vial, 50 mL sterile glass vial, alcohol swab, syringe, needle
  - If your needle is not already connected to the syringe, twist the needle onto your syringe with the needle cap still attached
- Remove any vial coverings and wipe all vial tops with an alcohol swab
- Reconstitute the meropenem vial with 20 mL of normal saline
  - To complete this step, with the needle cap still on, pull up air in your syringe to the 20 mL line
  - Inject this into the normal saline vial by inserting the needle into the rubber top with the bevel facing up towards you
  - Once the needle is inserted and the air has been injected, tilt the vial upside down and withdraw 20 mL worth of normal saline
  - Withdraw your needle from the vial of saline
  - With your 20 mL of normal saline, insert the needle into the meropenem vial and inject the entire contents of the syringe
  - You may receive pressure pushback from additional air, allow the air to push back into the syringe after injecting the normal saline and withdraw the needle
- Shake to dissolve the powder and let stand until the solution is clear
- Remove all the contents from the meropenem vial and transfer to the empty 50 mL sterile glass vial
  - Utilize the same technique as with the normal saline
  - There should be ~20 mL of liquid to remove
  - If you receive pushback while injecting this into the 50 mL sterile vial, allow the air to push back into the syringe after injecting the contents and withdraw the needle
- Draw up the remaining 30 mL of normal saline and inject into the 50 mL sterile glass vial to reach a final concentration of 20 mg/mL of medication
  - Utilize the same technique as before to remove the 30 mL of normal saline
  - If you receive pushback while injecting this into the 50 mL sterile vial, allow the air to push back into the syringe after injecting the contents and withdraw the needle
- The reconstituted injectable meropenem should be stored in the refrigerator for a maximum of 5 days

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