7.1: Introduction

Parenteral medications are medications administered directly into body tissue or the circulatory system (according to Merriam-Webster, "parenteral" is a term taken from the Greeks meaning "to avoid the intestines"). They are synonymous with "injectables," as syringes and needles are used to administer these medications by subcutaneous, intradermal, intramuscular, and intravenous routes. Injections are a direct and reliable way to deliver medication for fast absorption. However, parenteral medications pose a greater risk of harm and adverse reactions than nonparenteral medications. Parenteral medications require special equipment and a specific skill set to ensure that the medication is prepared correctly to have the right therapeutic effect, and to avoid complications (Perry, Potter, & Ostendorf, 2014).

Learning Objectives

• Describe the advantages and disadvantages of injecting medications by each parenteral route
• Explain how to safely administer parenteral medication, prevent needle-stick injuries, prevent infection, and minimize patient discomfort during an injection
• Discuss factors related to equipment and selection of injection site for each parenteral route
• Describe how to correctly administer intradermal, subcutaneous, and intramuscular injections
• Review how to administer an intravenous medication via the direct IV route (bolus) and by a piggyback infusion through a continuous IV line and a saline lock
• Describe how to manage adverse reactions to IV medications
• Explain the complications associated with intravenous medications
• Summarize how to manage and report medication errors in the health care setting