

### Least desirable – Why?

- Inconsistent layer of adipose tissue (1 – 9 cm)
- Less muscle than ventrogluteal site
- Close to sciatic nerve, superior gluteal nerve and artery increasing risk for major injury

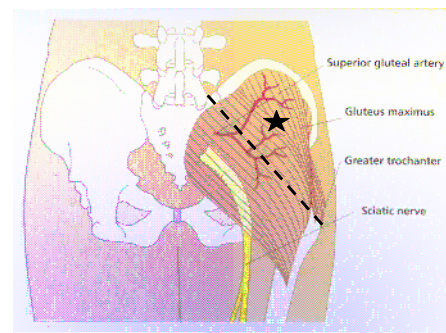
### Least desirable – Why?

- 16 lawsuits in North America in past 25 years involving sciatic nerve injury as result of dorsogluteal injection

### How to Landmark

- Quadrant technique not recommended
- Draw an imaginary line from the posterior iliac spine to the greater trochanter
- Injection site is above and lateral to that line

### How to Landmark



### Purpose of Subcutaneous (SQ) Injections

- Deposit medication into adipose and connective tissue in subcutaneous layer of skin
- Deliver small volumes
- Used for isotonic, nonirritating, aqueous solutions

### Benefits of SQ Route

- Provides slow continuous absorption
- Not as richly supplied with blood vessels as muscle

## Potential Complications

- Site Pain
- Bruising
- Accidental IM injection
- Sterile abscess
- Lipohypertrophy

## General Guidelines

- Needle selection
- Angle of injection
- Aspiration of blood
- Site selection
- Site massage
- Documentation

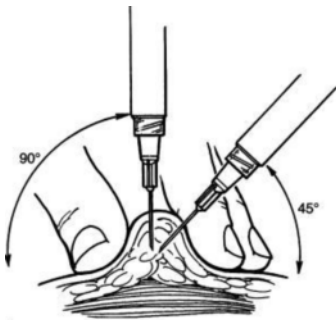
## Needle selection

- Determined by body weight and adipose tissue
- 25 – 27 gauge
- $\frac{1}{2}$ " -  $\frac{5}{8}$ " length

## Angle of Injection

- Depends on amount of SQ tissue
- 45 to 90 ° angle in normal-size adults
- 90 ° angle in obese adults
- If you can pinch a 1" tissue fold, use 45° angle
- 2" fold, use 90° angle

## Angle of Injection



## Aspiration of blood

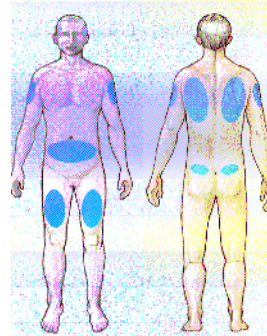
- Not recommended for SQ injections
- Piercing blood vessel rare
- Can cause hematoma

## Site Selection

Potential sites:

- Outer aspect of upper arms
- Abdomen below the costal margins to iliac crest
- Anterior aspect of thigh
- Scapula
- Upper gluteal

## SQ Injection Sites



## Site Massage

- Not recommended after injection
- Can damage underlying tissue
- Can cause medication to be absorbed faster than intended

## Documentation

- Sign MAR
- Patient response to medication
- Undesirable effects from medication or procedure

Questions?