

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Francesca Heller

MEDICATION Pneumococcal Polysaccharide Vaccine (Pneumonia) REVIEW MODULE CHAPTER _____

CATEGORY CLASS Vaccine

PURPOSE OF MEDICATION

Expected Pharmacological Action

- Stimulates immune system to produce antibodies against pneumococcal bacteria
- antibodies circulate in blood, providing systemic immunity

Therapeutic Use

- Prevention of pneumococcal disease caused by 23 serotypes in:
 - Persons $\geq 2y$ at risk
 - Adults $\geq 50y$

Complications **Common: >10%**

- Local:**
 - Swelling, pain, redness, tenderness
 - Fatigue, headache
- Neuro:**
 - Asthenia, myalgia
- Muscle:**
 - Asthenia, myalgia
- Less Common:**
 - pruritus, diarrhea, nausea, dyspepsia, chills, Neck pain, fever, cellulitis, urticaria, erythema, Guillain Barre syndrome, arthralgia, arthritis

Medication Administration

- R/D: adults IM/SubQ: 0.5mL/dose (deltoid/lateral mid thigh)
- Do not admin: IV or intradermal
- **Pedi:** ($\geq 2y$) 0.5mL IM/SubQ repeat $\geq 5y$ after 1st dose.
- Vaccinate/admin: seated or lying down: syncope risk
- Do not mix

Contraindications/Precautions

- C:**
 - severe allergy to PPSV23 or component
- P:**
 - anaphylaxis (previous)
 - acute illness
 - bleeding disorders/anticoagulants
 - Splenectomy (vac ≥ 2 wks prior)
 - CSF leaks, cochlear implants, resp. disease
 - corticosteroids
 - immunocomprom: 2ed (\downarrow response)
 - Elderly (lower antibody titers)

Nursing Interventions

- monitor 15' post: syncope
- monitor for allergic reactions/side effects
- document vaccination + client response
- assess lung sounds
- ask about current meds

Interactions

- acetaminophen: may \downarrow immune response
- Anti-CD20 B cell depleting therapies
- Systemic corticosteroids: \downarrow efficacy
- gene therapies (atidarsagene, elivaldogene): avoid during therapy

Client Education

- Purpose: prevent pneumococcal disease
- Educate side effects
- Notify HCP about: Allergic reactions, swelling, trouble breathing, rash, hives
- Report side effects
- Slow movements

Evaluation of Medication Effectiveness

- Client shows no signs of pneumococcal infection
- Maintains normal body temp.
- Remains free of resp. symptoms (cough, SOB)

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Francesca Heller
 MEDICATION Influenza H1N1 Vaccine (Afluria, Fluzone, Flucel) REVIEW MODULE CHAPTER _____
 CATEGORY CLASS Vaccine

PURPOSE OF MEDICATION

Expected Pharmacological Action

- Absorbed following IM/Intranasal administration
- causes the production of antibodies against H1N1 influenza disease

Therapeutic Use

Protection against H1N1 influenza disease

- less time missed school/work
- decreased complications

Complications

IM: - local pain, soreness, swelling, tenderness;
 - myalgia, thrombocytopenia

Intranasal: - Nasal congestion/runny nose
 - sore throat, cough, headache, pharynx, weakness, myalgia, fever, chills

Medication Administration

Route/Dosage:

- IM: - (adults > 10y): 0.5 mL 1 dose
- Children 3-9y: 0.5 mL repeat 1 month
- Children: 6-35mo: 0.25 mL q 1 mo

• Intranasal:
 - Children (2-9y): 0.2 mL q 1 mo
 - ~~children~~ adults 10-49y: 0.2 mL 1d

Implementation:

IM: Shake well; do not mix w other vac

Intranasal: upright position, spray 1/2 in ea nostril, dispose

Contraindications/Precautions

Contraindications:

- severe hypersensitivity
- Children < 24 months (↑ risk wheezing/hospitalization)
- children < 5y w recurrent wheezing
- Concurrent aspirin therapy children/adol.

Precautions:

- immuno suppressed - pregnancy/lactation
- elderly (↓ antibodies) - pediatric
- underlying conditions

Nursing Interventions

- monitor for: allergic reactions, pruritis, laryngeal edema, wheezing
- keep: epinephrine, antihistamines, and resuscitation equip. (anaphylaxis risk)
- Labs: - Platelet count: risk for thrombocytopenia
 - CBC

Interactions

- IM & Nasal: immunosuppressants/radiation; ↓ antibody response
- Intranasal only:
 - Antivirals for influenza A/B; ↓ effectiveness
 - Avoid vac within 48 hrs of stopping antivirals
 - Don't start antivirals until 2 wks after vaccination

Client Education

- **Purpose:** Seasonal trivalent influenza vaccine
- **Notify HCP if:** pregnant, planning or breastfeeding
- **Intranasal:** avoid contact w immunocompromised pts for ≥ 21 days

Evaluation of Medication Effectiveness

- Prevention of flu; fewer lost days from work/school

