

SERVICE	ATTENDING	RESIDENT
DIAGNOSIS	CONDITION	
ALLERGIES		

TRIMETHOPRIM/SULFAMETHOXAZOLE DESENSITIZATION PROTOCOL – Page 1 of 2

NOTE: This protocol provides the patient with **temporary** antibiotic desensitization only. Their therapy must not be interrupted during the desensitization process. If a drug-free period of 24 hours or greater occurs, the patient will need to repeat the desensitization.

I. NURSING

Provide one-to-one nursing care during the desensitization process.

Please speak with charge nurse to arrange nursing coverage.

Admit to 4 South (Special Procedures Unit) **or** to ICU **or** to floor: _____ (after 1:1 nursing is arranged).

II. MEDICATIONS

1. Initiate the desensitization protocol for:

- trimethoprim/sulfamethoxazole _____ mg (5mg/kg **trimethoprim**) IVPB every _____ hours
- trimethoprim/sulfamethoxazole DS _____ tablet(s) PO every _____ hours

2. Have available at bedside (pharmacy please send):

- Diphenhydramine 50mg PO (send **elixir**)/IV x1 PRN systemic reaction (see Systemic Reaction Chart, reverse side on page 2)
- Epinephrine 0.3mL 1:1,000 (0.3mg) subcutaneously x1 PRN systemic reaction (see Systemic Reaction Chart, reverse side on page 2)
- Hydrocortisone 50-100mg IV x1 PRN severe systemic reaction (per Rapid Response Team)

3. Desensitization instructions:

For **IV trimethoprim/sulfamethoxazole:**

- Infuse each dose over 20 minutes. Wait 15 minutes after completing the dose before starting the next infusion. Total time from start of infusion to start of next infusion is 35 minutes.
- Infuse the first full therapeutic dose (dose 8) over 2 hours.

For **ORAL trimethoprim/sulfamethazole:**

- Give one dose every 1 hour.
- If full therapeutic dose is greater than 160mg (**trimethoprim** component), give a seventh desensitizing dose at full therapeutic dose (as indicated above).
- After giving the first full therapeutic dose (dose 6 or dose 7), observe the patient for 2 hours.

PT.NO

NAME

DOB

UW Medicine

Harborview Medical Center – UW Medical Center
University of Washington Physicians
Seattle, Washington

TMP/SMX DESENSITIZATION ORDERS

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UH2287 REV NOV 06

WHITE - MEDICAL RECORD
CANARY - PHARMACY
PINK - NURSING

PHYSICIAN ORDER – YELLOW

TRIMETHOPRIM/SULFAMETHOXAZOLE DESENSITIZATION PROTOCOL – Page 2 of 2

ORAL DESENSITIZATION DOSE ADMINISTRATION CHART		INTRAVENOUS DESENSITIZATION DOSE ADMINISTRATION CHART	
trimethoprim/sulfamethoxazole		trimethoprim/sulfamethoxazole	
Dose 1	1mL of 0.004mg/0.02mg/mL suspension	0.00032mg/0.0016mg	in 50mL D5W
Dose 2	10mL of 0.004mg/0.02mg/mL suspension	0.0032mg/0.016mg	in 50mL D5W
Dose 3	1mL of 0.4mg/2mg/mL suspension	0.032mg/0.16mg	in 50mL D5W
Dose 4	10mL of 0.4mg/2mg/mL suspension	0.32mg/1.6mg	in 50mL D5W
Dose 5	5mL of 8mg/40mg/mL suspension	3.2mg/16mg	in 50mL D5W
Dose 6	One 160mg/800mg tablet	32mg/160mg	in 50mL D5W
Dose 7	If full therapeutic dose is greater than 160mg/800mg tablet, give full therapeutic dose.	80mg/400mg	in 100mL D5W
Dose 8		Infuse full therapeutic dose over 2 hours.	

III. VITALS

- For **IV trimethoprim/sulfamethoxazole**:

Monitor vitals at the start of each infusion, 10 minutes after the start of each infusion, and at the end of each infusion until completion of the first full therapeutic dose.

- For **ORAL trimethoprim/sulfamethoxazole**:

Monitor vitals at the time of each dose and every 15 minutes until 2 hours after completion of the first full therapeutic dose.

Call team for:

- Systolic blood pressure >180mmHg or <90mmHg
- Diastolic blood pressure >110mmHg or <60mmHg
- Heart rate >130bpm or <60bpm
- Temperature >38.5°C
- Respiration rate >30/min or <12/min, wheezing, or shortness of breath
- Hives, rash, or severe itching

IV. MANAGEMENT OF SYSTEMIC REACTIONS

If a systemic reaction occurs:

- Stop infusion (if applicable).
- Page Dr. _____.
- Pager: _____.
- Treat as indicated per Systemic Reaction Chart (see reverse side).

PHYSICIAN SIGNATURE	PRINT NAME	PAGER	UPIN	DATE	TIME
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PT.NO

NAME

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Seattle, Washington

TMP/SMX DESENSITIZATION ORDERS PAGE 2 OF 2



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SYSTEMIC REACTION CHART		
Reaction Severity	Signs and Symptoms	Management
Mild	Mild urticaria without hemodynamic instability, respiratory distress, or angioedema	<ul style="list-style-type: none"> • May administer diphenhydramine 50mg PO/IV x1 dose. • The last dilution tolerated without difficulty should be repeated and the protocol continued if no further reaction occurs.
Moderate	Chest tightness, diffuse hives, but WITHOUT hemodynamic or airway compromise	<ul style="list-style-type: none"> • Administer diphenhydramine 50mg PO/IV x1 dose. • If no improvement in symptoms after 10-15 minutes, administer epinephrine 0.3mL 1:1,000 (0.3mg) subcutaneously x1 dose. Notify MD if administered. • If symptoms resolve within 30 minutes, the last dilution tolerated without a reaction should be repeated and the protocol continued if no further reaction occurs.
Moderate to severe	Diffuse wheezes, stridor (throat tightness) WITH or WITHOUT chest tightness	<ul style="list-style-type: none"> • Administer epinephrine 0.3mL 1:1,000 (0.3mg) subcutaneously x1 dose. • Administer diphenhydramine 50mg PO/IV x1 dose. • Place IV line if not present. • Call Rapid Response Team STAT to bedside. • If symptoms subside quickly and if the antibiotic is considered absolutely necessary, give ONE-HALF the last tolerated dose with physician at bedside. • If dose is tolerated without reaction, the protocol can be continued.
Severe	Hypotension, laryngeal edema with or without urticaria	<ul style="list-style-type: none"> • Administer epinephrine 0.3mL 1:1,000 (0.3mg) subcutaneously x1 dose. • Administer diphenhydramine 50mg PO/IV x1 dose. • Place IV line if not present. • Call Rapid Response Team STAT to bedside. • Discontinue protocol.

V. REFERENCE

1. O'Dowd, LC, Atkins, P. Penicillin and related antibiotic allergy; skin testing; and desensitization. In: UpToDate, Rose, BD (Ed), *UpToDate*, Waltham, MA, 2006. [Cited on 8/28/2006].
2. Turvey, SE, Cronin, B, Arnold, AD, Dioun, AF. Antibiotic desensitization for the allergic patient: 5 years of experience and practice. *Ann Allergy Asthma Immunol*. 2004 Apr; 92(4): 426-32.
3. Tidwell, BH, Cleary, JD, Lorenz, KR. Antimicrobial Desensitization: A Review of Published Protocols. *Hosp Pharm*. 1997 Oct; 32: 1362-9.
4. Gluckstein, D, Ruskin, J. Rapid Oral Desensitization to Trimethoprim-Sulfamethoxazole (TMP-SMZ): Use in Prophylaxis for *Pneumocystis carinii* Pneumonia in Patients with AIDS Who Were Previously Intolerant to TMP-SMZ. *Clin Infect Dis*. 1995 Apr; 20(4): 849-53.