



## Bonus Monographs



### Minocycline hydrochloride

(mih-no-**SYE**-kleen)

#### PREGNANCY CATEGORY: D CLASSIFICATION(S):

Antibiotic, tetracycline

**Rx:** Arestin, Dynacin, Minocin, Vectrin, Minocin IV

★**Rx:** Alti-Minocycline, Apo-Minocycline, Gen-Minocycline, Novo-Minocycline, Rhoxal-minocycline, Scheinpharm Minocycline

SEE ALSO **ANTI-INFECTIVES** AND **TETRACYCLINES**.

#### ACTION/KINETICS

In fasting adults, 90% to 100% of an oral dose is absorbed. **Peak plasma levels:** 1–4 hr. Absorption is less affected by milk or food than for other tetracyclines. **t<sub>1/2</sub>, elimination:** 11–26 hr. Metabolized in the liver.

#### USES

See also *Tetracyclines*. To eliminate meningococci from the nasopharynx of asymptomatic *Neisseria meningitidis* carriers in which the risk of meningococcal meningitis is high. **NOTE:** Due to adverse CNS effects, use rifampin to treat meningococcus carriers when the drug susceptibility is not known or when the organism is sulfam-resistant. Use minocycline only when rifampin is contraindicated.

(1) Granulomas of the skin caused by *Mycobacterium marinum*. (2) In combination with gonococcal regimens for presumptive treatment of coexisting chlamydial infections. (3) Uncomplicated gonococcal urethritis

in adult males. (4) Treatment of uncomplicated urethral, endocervical, or rectal infections caused by *Chlamydia trachomatis* or *Ureaplasma urealyticum* in adults. (5) Intrapleurally as a sclerosing agent to control pleural effusions associated with metastatic tumors. (6) Treatment of cholera and nocardiosis. (7) Adjunctive treatment of inflammatory acne unresponsive to oral tetracycline HCl or oral erythromycin. (7) Adjunctive treatment of adult periodontitis (Arestin).

#### ADDITIONAL SIDE EFFECTS

Blue-gray pigmentation areas of cutaneous inflammation, vertigo, ataxia, drowsiness, **Stevens-Johnson syndrome** (rare).

#### HOW SUPPLIED

**Capsules:** 50 mg, 100 mg; **Capsules, pellet filled:** 50 mg, 100 mg; **Microspheres, sustained-release:** 1 mg; **Powder for Injection:** 100 mg; **Oral Suspension:** 50 mg/5 mL

#### DOSAGE

##### • CAPSULES, INJECTION, ORAL SUSPENSION

*Infections against which effective, including asymptomatic meningococcus carriers.*

**Adults, initial:** 200 mg; **then,** 100 mg q 12 hr. An alternative regimen is 100–200 mg initially followed by 50 mg q 6 hr. The length of treatment is 5 days for meningococcus carriers. **Children over 8 years of age, initial:** 4 mg/kg; **then,** 2 mg/kg q 12 hr.

*Mycobacterial infections.*

100 mg PO b.i.d. for 6–8 weeks.

*Uncomplicated gonococcal urethritis in adult males.*

100 mg b.i.d. for 5 days.

## 2 MINOCYCLINE HYDROCHLORIDE

*Uncomplicated urethral, endocervical, or rectal infections due to Chlamydia trachomatis or Ureaplasma urealyticum.*

100 mg PO b.i.d. for at least 7 days.

*Nongonococcal urethritis caused by C. trachomatis or Mycoplasma.*

100 mg/day PO in 1 or 2 divided doses for 1 to 3 weeks.

*Sclerosing agent to control pleural effusions associated with metastatic cancer.*

300 mg diluted with 40–50 mL of 0.9% NaCl injection and instilled into the pleural space through a thoracostomy tube.

*Cholera in conjunction with fluid and electrolyte replacement.*

**Initial:** 200 mg PO; **then,** 100 mg PO q 12 hr for 48–72 hr.

*Adjunct to treat inflammatory acne unresponsive to PO tetracycline HCl or erythromycin.*

50 mg PO 1–3 times/day.

### • MICROSPHERES, SUSTAINED-RELEASE

*Adult periodontitis.*

Amount given depends on the size, shape, and number of pockets being treated.

### NURSING CONSIDERATIONS

SEE ALSO NURSING CONSIDERATIONS FOR ANTI-INFECTIVES AND TETRACYCLINES.

#### ADMINISTRATION/STORAGE

1. Minocycline microspheres (Arestin) are delivered directly into the infected periodontal pocket after scaling and root planing. No refrigeration or mixing is needed and the product does not require removal.

**IV** 2. Do not dissolve in solutions containing calcium; forms a precipitate.

3. After dissolving medication in the vial, further dilute to 500–1,000 mL with any of the following: dextrose, dextrose and NaCl, NaCl, RL, Ringer's injection.

4. Start administration of the final dilution immediately.

5. Discard reconstituted solutions after 24 hr at room temperature.

#### ASSESSMENT

1. Document onset, location, and characteristics of S&S.

2. Monitor C&S, renal and LFTs, and CBC; identify contacts when treating contagious diseases. Ensure ID referral.

#### CLIENT/FAMILY TEACHING

1. Take complete prescription; may take with meals if GI upset occurs. Check expiration date; avoid outdated products due to adverse effects.

2. Avoid activities that require mental alertness until drug effects realized.

3. With STDs, use condoms during therapy to prevent reinfections and obtain periodic cultures.

4. Practice reliable non-hormonal birth control; drug may cause fetal harm.

5. Avoid prolonged sunlight exposure; may cause photosensitivity reaction.

6. Report any dizziness, unusual bruising/bleeding, severe rash or diarrhea, difficulty breathing, dark urine or light stools, severe cramps, and lack of improvement after 72 hr.

#### OUTCOMES/EVALUATE

Symptomatic improvement; resolution of infection