

E.E.S.®

(erythromycin ethylsuccinate)

INDICATIONS: *Streptococcus pyogenes* (Group A beta hemolytic streptococcus): Upper and lower respiratory tract, skin, and soft tissue infections of mild to moderate severity.

Injectable benzathine penicillin G is considered by the American Heart Association to be the drug of choice in the treatment and prevention of streptococcal pharyngitis and in long-term prophylaxis of rheumatic fever.

When oral medication is preferred for treatment of the above conditions, penicillin G, V, or erythromycin are alternate drugs of choice.

When oral medication is given, the importance of strict adherence by the patient to the prescribed dosage regimen must be stressed. A therapeutic dose should be administered for at least 10 days.

Alpha-hemolytic streptococci (viridans group): Although no controlled clinical efficacy trials have been conducted, oral erythromycin has been suggested by the American Heart Association and American Dental Association for use in a regimen for prophylaxis against bacterial endocarditis in patients hypersensitive to penicillin who have congenital heart disease, or rheumatic or other acquired valvular heart disease when they undergo dental procedures and surgical procedures of the upper respiratory tract. Erythromycin is not suitable prior to genitourinary or gastrointestinal tract surgery. NOTE: When selecting antibiotics for the prevention of bacterial endocarditis the physician or dentist should read the full joint statement of the American Heart Association and the American Dental Association.

Staphylococcus aureus: Acute infections of skin and soft tissue of mild to moderate severity. Resistant organisms may emerge during treatment.

Streptococcus pneumoniae (Diplococcus pneumoniae): Upper respiratory tract infections (e.g., otitis media, pharyngitis) and lower respiratory tract infections (e.g., pneumonia) of mild to moderate degree.

Mycoplasma pneumoniae (Eaton agent, PPLO): For respiratory infections due to this organism.

Hemophilus influenzae: For upper respiratory tract infections of mild to moderate severity when used concomitantly with adequate doses of sulfonamides. (See sulfonamide labeling for appropriate prescribing information). The concomitant use of the sulfonamides is necessary since not all strains of *Hemophilus influenzae* are susceptible to erythromycin at the concentrations of the antibiotic achieved with usual therapeutic doses.

Treponema pallidum: Erythromycin is an alternate choice of treatment for primary syphilis in patients allergic to the penicillins. In treatment of primary syphilis, spinal fluid examinations should be done before treatment and as part of follow-up after therapy.

Corynebacterium diphtheriae: As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in carriers.

Corynebacterium minutissimum: For the treatment of erythrasma.

Entamoeba histolytica: In the treatment of intestinal amebiasis only. Extraenteric amebiasis requires treatment with other agents.

Listeria monocytogenes: Infections due to this organism.

Bordetella pertussis: Erythromycin is effective in eliminating the organism from the nasopharynx of infected individuals, rendering them non-infectious. Some clinical studies suggest that erythromycin may be helpful in the prophylaxis of pertussis in exposed susceptible individuals.

Legionnaires' Disease: Although no controlled clinical efficacy studies have been conducted, *in vitro* and limited preliminary clinical data suggest that erythromycin may be effective in treating Legionnaires' Disease.

CONTRAINDICATIONS: Erythromycin is contraindicated in patients with known hypersensitivity to this antibiotic.

PRECAUTIONS: Erythromycin is principally excreted by the liver. Caution should be exercised in administering the antibiotic to patients with impaired hepatic function. There have been reports of hepatic dysfunction, with or without jaundice occurring in patients receiving oral erythromycin products.

Areas of localized infection may require surgical drainage in addition to antibiotic therapy.

Recent data from studies of erythromycin reveal that its use in patients who are receiving high doses of theophylline may be associated with an increase of serum theophylline levels and potential theophylline toxicity. In case of theophylline toxicity and/or elevated serum theophylline levels, the dose of theophylline should be reduced while the patient is receiving concomitant erythromycin therapy.

Usage during pregnancy and lactation: The safety of erythromycin for use during pregnancy has not been established.

Erythromycin crosses the placental barrier. Erythromycin also appears in breast milk.

ADVERSE REACTIONS: The most frequent side effects of erythromycin preparations are gastrointestinal, such as abdominal cramping and discomfort, and are dose related. Nausea, vomiting, and diarrhea occur infrequently with usual oral doses.

During prolonged or repeated therapy, there is a possibility of overgrowth of nonsusceptible bacteria or fungi. If such infections occur, the drug should be discontinued and appropriate therapy instituted.

Allergic reactions ranging from urticaria and mild skin eruptions to anaphylaxis have occurred.

There have been isolated reports of reversible hearing loss occurring chiefly in patients with renal insufficiency and in patients receiving high doses of erythromycin.



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Letters to the Editor



The Journal welcomes Letters to the Editor; if found suitable, they will be published as space allows. Letters should be typed double-spaced, should not exceed 400 words, and are subject to abridgment and other editorial changes in accordance with journal style.

Telescopic Laryngoscopy

To the Editor:

The excellent article, "Telescopic Laryngoscopy" by Drs. Geyman and Kirkwood in the *Journal* (*J Fam Pract* 16:789, 1983), is a welcome contribution to a neglected part of the physical examination.

I would like to point out one brief statement that seems to me to be in error: "The Larynx Vue is an example of the direct-viewing telescopes now available. . . ."

A procedure using mirrors to view the larynx, as in the case of the right-angled telescope described in the article, is indirect laryngoscopy. Direct laryngoscopy is, as the name suggests, direct viewing of the larynx via a straight laryngoscope, such as in the procedure of endotracheal intubation. The distinction is more important than it might seem; direct laryngoscopy has its own procedure code and is a compensable service in the Pennsylvania Medical Assistance Program, whereas indirect laryngoscopy is not. Practitioners having read this article might be misled into billing improperly for the pro-

cedure, with potential subsequent embarrassment.

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The preceding letter was forwarded to Drs. Geyman and Kirkwood, who reply as follows:

In pointing out that laryngoscopy performed with the Larynx Vue laryngoscope is indirect, Dr. Stephenson is completely correct. He is also correct that there are separate procedure codes for these two procedures. In some locations this fact may imply differences in compensation. It is our view, however, that since the indirect laryngoscope, when indicated, adds significantly to the quality of patient care and also has a fixed purchase cost that must be amortized, use of

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the instrument should be a compensable service.

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Risks of Sterilization Procedures

To the Editor:

The article by Drs. Markman and Frankel (*Markman LM, Frankel HA: The choice of sterilization procedure among married couples. J Fam Pract 14:27, 1982*) stated that "neither [vasectomy nor tubal ligation] has overwhelming advantages over the other" as a form of sterilization procedure. I would agree that both are relatively safe as procedures go; however, given no psychological or medical history differences in the couple, I feel vasectomy presents considerable advantages when the entire situation is considered.

No deaths have been reported from vasectomy,¹ whereas the risk from general anesthesia in addition to the procedure of tubal ligation is small but real (1 to 10/100,000). Short-term complications from vasectomy are relatively minor and localized and rarely need hospitalization. They include pain, infection, sperm granuloma formation, hematoma, and spontaneous recanalization.² On the contrary, the risks from tubal ligation include perforated bowel, anesthetic complications, inadvertent coagulation of vital structures, failure to produce sterility with tubal pregnancies, uterine perforation with the elevating instrument, bowel burns, hemor-

rhage, and the "post-tubal ligation syndrome" variably characterized as menorrhagia, anovulation, and pelvic pain.³ The increased technology employed during tubal ligations leaves room for increased error. The failure rate in vasectomy is considerably better than the "less than 1 per 100" quoted in the article and more closely averages 1 in 400 (0.2 percent).² Failure for tubal ligations is quoted as between 0.2 percent and 2 percent.²

The long-term side effects in vasectomy are as yet not clearly defined. Man-based studies at the present do not show an increased incidence of diabetes mellitus, collagen vascular disease, or atherosclerotic vessel disease, although some animal studies suggest caution.^{2,4-7} Complications following tubal ligation include ectopic pregnancy and, more commonly, abnormal uterine bleeding, requiring further diagnostic workup and the attendant complications.³ Psychiatric problems are minimal in both.

A real advantage to vasectomy is the ability to determine true sterility. Semen specimens are easily obtained. How does one detect the failures of tubal ligation procedures prior to conception?

Markman states that vasectomy and tubal ligations were performed in "the outpatient surgical facilities of the Wilmington Medical Center." Perhaps this is why he did not recognize a cost benefit to vasectomy. If performed in a physician's office, vasectomy has only 20 to 25 percent of the associated costs of a tubal ligation in the operating room. Even if one were to conclude that all other risks were in balance, one cannot ignore the economics.

I would also take exception to the statement in the article that "vasectomies constitute 17 percent of sterilization operations." These

data were obtained from PAS studies, procedures performed in hospitals. The American College of Surgeons reported that 641,000 tubal ligations were performed in hospitals in 1982.⁸ Based on Association of Voluntary Sterilization figures, the annual recorded vasectomy rate in the United States is approximately 500,000, "with probably as many unreported vasectomy procedures performed annually."^{2,9}

In my view, there are strong arguments to suggest to patients that vasectomy is the more advantageous sterilization procedure. As an editorial in JAMA states, "vasectomy has gained respect in the US as the single 'best' (permanent) contraceptive method."¹⁰

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