Louisiana

DEPARTMENT OF HEALTH AND HUMAN RESOURCES
OFFICE OF HEALTH SERVICES AND ENVIRONMENTAL QUALITY
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MONTHLY MORBIDITY REPORT

Provisional Statistics

from

EPIDEMIOLOGY UNIT AND PUBLIC HEALTH STATISTICS

Reported Morbidity
March, 1980

PPNG - SHREVEPORT

Since January 21, 1980, twenty-six cases of penicillinase-producing *Neisseria gonorrhoeae* (PPNG) have been reported from the Shreveport area. These are the first cases seen in Louisiana since a foreign national seaman was treated for PPNG in New Orleans in 1978.

The current cases appear to be indigenous to the Shreveport area. Only one case, a named contact living in Dallas, Texas, has been identified outside the immediate Shreveport area. None of the cases have traveled outside the continental United States and no military personnel or their dependents have been implicated. A total of 60 persons have been investigated as contacts, of which 14 were diagnosed as PPNG cases. The remaining cases were voluntary clinic walk-in patients whose cultures were screened for penicillin sensitivity. Ten chains of infection have been identified among the twenty-six known PPNG cases, the longest containing four generations of infection. Three cases were in females who evidenced pelvic inflammatory disease (PID) symptoms.

After the initial case of PPNG was confirmed, the state laboratory began performing penicillin-sensitivity (disk) tests on all suspect gonorrhea cultures in the Shreveport area. This testing was backed up by beta-lactamase testing of all penicillin-resistant cultures. Patients found to have PPNG received 2.0 gm spectinomycin (Trobicin) intramuscularly, as did their contacts. Subsequent reculturing has revealed no treatment failures. Since gonococci are very rarely resistant to spectinomycin, and reinfection is the most common cause of treatment failure, patients with positive cultures after spectinomycin therapy should be retreated with spectinomycin in the same dosage. A PPNG isolate resistant to spectinomycin may be treated with cefoxitin 2.0 gm, in a single intramuscular injection, with probenecid, 1.0 gm, by mouth.

Physicians in Louisiana should be aware of the presence of penicillin-resistant gonorrhea in the state. Cases of suspect gonorrhea and contacts of known cases should continue to be treated with aqueous procaine penicillin (4.8 million units) intramuscularly or with one of the alternative regimens employing tetracycline or ampicillin. All suspect gonorrhea cases should have a routine culture and all confirmed cases should be recultured 5–7 days after treatment has been completed. All positive recultures should then be tested for penicillin sensitivity and penicillin resistance should be confirmed by B-lactamase testing. Cultures for B-lactamase tests can be sent to any regional laboratory or the Central State Laboratory in New Orleans.

In the Shreveport area, all physicians are urged to do penicillin sensitivity testing immediately on all positive gonorrhea cultures, without waiting for treatment failures.

For further information of PPNG, call the State Venereal Disease Control Unit in New Orleans (504) 568-5275.

SHORT COURSE CHEMOTHERAPY FOR TUBERCULOSIS

Adapted from MMWR Vol. 29, NO. 9, Mar. 7, 1980
(Joint Statement of the American Thoracic Society and the Center for Disease Control)

Introduction:

Isoniazid (INH), Rifampin (RIF), Ethambutol (EMB), and Streptomycin (SM) in various combinations are the most popular drugs currently in use for the treatment of TB in the United States. They are combined in various regimens, usually for 18-24 month treatment periods.

The objective of tuberculosis therapy has always been to achieve lifetime control of the disease for the patient. The primary factor which has continually thwarted this goal is noncompliance or failure to complete the prescribed regimen. As a potential means of combatting this problem and reducing the

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costs of treatment and follow-up, several studies have been undertaken to assess the efficacy of shorter periods of treatment.

Short-Course Chemotherapy (SCC) : Current State

There are 3 reported SCC regimens that are most relevant to shortening the duration of TB chemotherapy:

(1) British Thoracic and Tuberculosis Association

A) INH + RIF + (SM or EMB) - 2 months

B) INH + RIF – 4-10 additional months

All drugs were given daily and presumably self-administered except during the hospital period (duration not reported) and the SM injections. The regimen that is of greatest interest in the 9-month therapy applied to patients with more extensive disease. In this group, all 135 patients showed good initial response, and no relapses were detected in 2 years' post-treatment observation. It should be noted, however, that a bias toward compliant patients may have operated in the enrollment for this study.

(2) British Medical Research Council (Singapore)

A) INH + RIF + SM – 2 weeks - daily

B) INH + RIF – 50 additional weeks - intermittent therapy

During the intermittent phase, the INH and RIF were given either once or twice a week, and the RIF was given either in 900 mg or 600 mg doses. The regimen that was composed of twice-weekly INH and RIF (600 mg per dose) was highly efficacious, well-tolerated, and relatively free of adverse effects.

(3) Arkansas Study

A) INH + RIF – 1 month - daily

B) INH + RIF – 8 months – twice weekly

There were 10 initial failures among 185 patients and 1 relapse in the remaining 175 patients. The intermittent therapy was generally self-administered although those patients deemed significantly non-compliant were put on supervised drug administration. There were few instances of significant drug toxicity among these patients.

Based on these studies, the following generalizations regarding SCC can be made:

(1) INH and RIF given regularly for 9 to 12 months result in highly acceptable initial response and relapse rates among patients with drug-susceptible organisms.

(2) A substantial portion of this therapy may be given on a twice-weekly basis. This may be either fully supervised or selectively supervised.

(3) The initial phase of daily therapy may be as short as 2 to 4 weeks.

(4) While SCC may prove effective in some patients with INH-resistant organisms, the overall response rates are not good enough to justify widespread use of SCC in this context.

(5) While there may be a modestly increased risk of toxicity with RIF given twice weekly, if the dose is proper the incidence of adverse reactions appears quite acceptable.

RECOMMENDATIONS FOR TREATMENT:

Based on the foregoing considerations, the following recommendations are offered for the treatment of tuberculosis in Louisiana.

I. Treatment

A. Adults:
INH (300 mg) + RIF (600 mg) daily

B. Children:
INH (10 mg/kg + RIF (10-20 mg/kg) up to 600 mg daily.

II. Duration of Therapy:
9 months or until at least 6 months have elapsed from conversion of sputum to culture negativity.

The official Public Health Service and American Thoracic Society recommendations state that patients judged to be unreliable in self-administration medicine should have INH (15 Mg/kg) and RIF (600 mg) directly administered twice a week after 2 weeks to 2 months of daily therapy at the usual dosage level. In Louisiana, we feel that the direct admininstration method is not feasible in our health units and we recommend daily self-administration with careful follow-up for compliance.

Other important points:

(1) At this time recommendations for shortened

treatment cannot be made for patients with extrapulmonary tuberculosis, for drug-resistant cases, or for patients with complicating medical conditions (diabetes, silicosis, or drug-or disease-induced immunosuppression).

(2) For the initial phase of treatment, the patient may or may not be hospitalized, depending on the severity of symptoms, public health considerations of infectiousness, and the ability to ingest medication and provide self-care.

(3) EMB (15 mg/kg) daily should be added if the patient resided in, or has immigrated from an area with a high level of initial drug resistance, or if a history of previous antituberculosis chemotherapy is obtained. Drug-susceptibility testing should be carried out under these circumstances because of the increased chance of initial drug resistance, especially to INH. If used, EMB should be continued until initial drug-susceptibility studies confirm susceptibility to INH and RIF. If resistance is found, a revision of the chemotherapy regimen and the length of treatment will be required.

(4) If drugs are self-administered, adherence to the regimen should be carefully monitored with such indicators as clinic attendance, pill counts, urine tests, and bacteriologic examinations of the sputum.

(5) It there are serious questions regarding the regularity of drug ingestion, if there have been complicating medical conditions, or if there is evidence of disseminated disease, it may be advisable to extend the duration of treatment even beyond 6 months of sputum negativity.

(6) Patient should remain under survillance for 12 months after completion of therapy. This practice should be continued until sufficient data are accumulated to assure the efficacy of the new regimen(s) under field conditions in the United States.

Comment:

Although the new United States Public Health service and American Thoracic Society recommendations fall short of an unqualified endorsement of the new SCC regimens, the time has come to introduce these new regimens into the United States on a widespread basis and continue the monitoring of their effectiveness. The studies cited in this report plus many others conducted in the United States and elsewhere demonstrate that all the SCC regimens are effective, if taken appropriately, and have very low relapse rates.

Sixty percent of the TB patients in Louisiana now fail to complete a full course of therapy within 24 months after the diagnosis is made. Ninety percent do complete a 6 month course and it is our hope that shortening the treatment to 9 months will significantly increase patient compliance with therapy, decrease the cost of TB treatment, and free public health workers to concentrate on close supervision of the patient while he/she is on medication.

The Communicable Disease Control Section of the Louisiana Office of Health Services and Environmental Quality feels that the new recommendations are a major step forward in the treatment of TB and urges all physicians in the state to give them serious consideration.

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Varicella-Zoster Immune Globulin*

Varicella-Zoster Immune Globulin (VZIG) continues to be available for immunodeficient children exposed to chickenpox. It is being released at no cost through the Division of Clinical Microbiology, Sidney Farber Cancer Institute (SFCI), 44 Binney Street, Boston, Massachusetts (617-732-3121). The Immunization Division, CDC (404-329-3747), the SFCI, and former VZIG consultants are available for consultation regarding alternative modes of therapy.

Since VZIG is still an investigational drug and its supply is limited, several criteria for release apply. These 5 criteria have been previously published in the MMWR in tabular form (*1*), but this year several clarifications are needed.

First, the term "newborn contact" (See Table 2, II-D) was previously described as a "newborn whose mother contracted varicella *within 4 days* before delivery or within 48 hours after delivery." In the revised table, the italicized term has been changed to "less than 5 days" because an appropriate newborn contact includes infants whose mothers develop the varicella rash up to but not including the fifth day before delivery. (Such infants have a 30% mortality rate [*2,3*].) No mortality has been associated with infants whose mothers contract varicella 5 or more days before delivery.

Second, the criterion concerning the age of patients, as listed on the table (item IV), is for patients less than 15 years old. However, on an *individual* basis, VZIG will be made available for certain patients between 15 and 21 years old.

Finally, the fifth criterion indicates that the request for treatment must be initiated within 72 hours of exposure. While any request for treatment must be initiated within this time period, treatment may be expected to modify or even prevent disease if started within 96 hours of exposure.

Reported by the Sidney Farber Cancer Institute, Boston, Massachusetts; and the Immunization Div, Bur of State Services, CDC.

References

1. MMWR 27:508, 1978
2. Meyers JD: Congenital varicella in term infants: Risk reconsidered. J Infect Dis 129:215-217, 1974
3. Gershon AA: Varicella in mother and infant: Problems old and new, in Drugman S, Gershon AA (eds): Symposium on Infections of the Fetus and the Newborn Infant. New York, Alan R. Liss, Inc., 1975, pp 88-89

TABLE 2. Five criteria for release of Varicella-Zoster Immune Globulin (VZIG) for the prophylaxis of varicella

I. **One of the following underlying illnesses or conditions**
   - A. Leukemia or lymphoma
   - B. Congenital or acquired immunodeficiency
   - C. Under immunosuppressive medication
   - D. Newly born of mother with varicella

II. **One of the following types of exposure to varicella or zoster patient**
   - A. Household contact
   - B. Playmate contact (>1 hour play indoors)
   - C. Hospital contact (in same 2- to 4-room bedroom or adjacent beds in a large ward)
   - D. Newborn contact (newborn whose mother contracted varicella less than 5 days before delivery or within 48 hours after delivery)

III. **Negative or unknown prior disease history**

IV. **Age of less than 15 years**

V. **The request for treatment must be initiated within 72 hours of exposure.**

* **Reprint from MMWR 29:9, 1980 p 589**

SELECTED REPORTABLE DISEASES
(By Place of Residence)

STATE AND PARISH TOTALS REPORTED MORBIDITY MARCH 1980	VACCINE PREVENTABLE DISEASES					ASEPTIC MENINGITIS	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	LEGIONNAIRES DISEASE	MALARIA**	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1979)
	MEASLES	RUBELLA*	MUMPS	PERTUSSIS	TETANUS														
TOTAL TO DATE 19 79	143	15	17	5	0	18	173	58	0	1	67	13	163	0	32	3	5466	194	2
TOTAL TO DATE 19 80	9	3	22	3	0	13	203	48	0	14	21	90	101	0	17	1	4926	296	4
TOTAL THIS MONTH	4	1	13	2	0	2	67	18	0	0	3	50	35	0	3	0	1593	97	1
ACADIA				1			2	1									10	1	
ALLEN																	1	1	
ASCENSION																	1		
ASSUMPTION																	2		
AVOYELLES	2																4		
BEAUREGARD																	5		
BIENVILLE																	1		
BOSSIER							2	1							1		14	2	
CADDO			11				1	2				2	7				173	2	3
CALCASIEU	1						2	1				1	2				51	3	
CALDWELL																	9		
CAMERON								3					1				1		
CATAHOULA																		1	
CLAIBORNE																	8		
CONCORDIA							1										1	1	
DESOTO																	1		
EAST BATON ROUGE							1						1		1		150	14	
EAST CARROLL			2				1										2	1	
EAST FELICIANA	1																		
EVANGELINE													2				1		
FRANKLIN																	6		
GRANT						1											4		
IBERIA							1	3			1						9		
IBERVILLE																	6	1	
JACKSON																	3		
JEFFERSON							24	3					1		1		79	3	
JEFFERSON DAVIS							2										7		
LAFAYETTE													3				21	2	
LAFOURCHE																	11		
LASALLE																			
LINCOLN																	8	3	
LIVINGSTON													1				4		
MADISON						1											9	1	
MOREHOUSE											1		1				13		
NATCHITOCHES																		1	
ORLEANS							8	2			1		3				640	36	
OUACHITA							2						1				103	5	
PLAQUEMINES							1										1		
POINTE COUPEE																		2	
RAPIDES																	63	5	
RED RIVER													1						
RICHLAND							1										13	2	
SABINE													1				1		
ST. BERNARD							5						4				5		
ST. CHARLES																	3	1	
ST. HELENA																		1	
ST. JAMES													1				6		
ST. JOHN																	1		
ST. LANDRY				1			5					1					1	1	
ST. MARTIN													1				11	1	
ST. MARY							1						1				4		
ST. TAMMANY		1					2	1				2					16		
TANGIPAHOA																	32	1	
TENSAS																			
TERREBONNE																	14		
UNION																	7		
VERMILION							2	1									1		
VERNON							1					44					17		
WASHINGTON																	6	3	
WEBSTER							1						1				14		1
WEST BATON ROUGE																	7		
WEST CARROLL													1				2		
WEST FELICIANA																		2	
WINN							1						1				4		
OUT OF STATE																	6		

* Includes Rubella, Congenital Syndrome.
** Acquired outside United States unless otherwise stated.

From January 1, 1980 through March 31, 1980, the following cases were also reported: 1 - Leptospirosis;
1 - Brucellosis;
1 - Blastomycosis.