LOUISIANA MONTHLY MORBIDITY — LHSRSA

DISEASES REPORTED DURING THE MONTH OF APRIL, 1973 **BY PARISH OF RESIDENCE**

LOST TO FOLLOW-UP

"Lost to follow-up", like cancer, cirrhosis, old age and the flu, carries with it a connotation of hopelessness that tends to end further discussion. It is one of the few clinical interpretations the practicing physician can make without fear of contradiction by his colleagues. Unlike his diagnoses, this pronouncement carries with it an implicit correctness which has the additional merit of freeing the physician from future, and in many cases, past therapeutic responsibility. Its implications are protean and may cover situations as diversified as the patient who takes his problems to another physician; the one who fails to return because he feels no need once his symptoms have abated, the "case" that genuinely does not understand the meaning of his diagnosis and unwittingly assumes himself disease-free; the man who commits the ultimate sin of removing himself from treatment against medical advice; or the patient and doctor who simultaneously realize they don't like each other anyway and are finally able to reach a happy equilibrium of mutual neglect.

Patient follow-up from the Health Department's standpoint has a much more limited connotation. It is either achieved or not achieved. Where it is not achieved, the system has in one way or another failed to fulfill its objective. Whether we talk about tuberculosis, immunizations, sanitary engineering or syphilis, follow-up is

BUREAU OF VITAL STATISTICS **DIVISION OF HEALTH MAINTENANCE AND AMBULATORY PATIENT SERVICES**

Prepared by:
DIVISION OF TABULATION & ANALYSIS
May 7, 1973

	ASEPTIC MENINGITIS	DIPHTHERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIOUS	INFECTIOUS AND SERUM HEPATITIS	TUBERCULOSIS, PULMONARY	MENINGOCOCCAL INFECTIONS	PERTUSSIS	POLIOMYELITIS, PARALYTIC	RABIES IN ANIMALS	RHEUMATIC FEVER	RUBELLA *	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	MEASLES	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY
TOTAL TO DATE 1972	12	4	0	6	240	182	19	11	0	17	5	67	23	0	45	2	58	5302	264
TOTAL TO DATE 1973	26	0	6	3	265	235	18	8	0	13	7	74	79	0	55	2	53	6715	264
TOTAL THIS MONTH	7	0	4	2	66	44	6	3	0	3	5	36	9	0	12	1	20	1730	77
ACADIA																		11	
ALLEN																		4	
ASCENSION																		1	
ASSUMPTION																		26	
AVOYELLES																		7	
BEAUREGARD																			
BIENVILLE																		2	1
BOSSIER					2	1									1			28	2
CADDO			1		3	5	1			1								128	3
CALCASIEU					1										2			51	
CALDWELL						1													
CAMERON															1				
CATAHOULA																		2	1
CLAIBORNE																		1	
CONCORDIA					2			2										1	
DESOTO										1								5	
EAST BATON ROUGE					2	1						7					9	63	13
EAST CARROLL					2													5	
EAST FELICIANA																			
EVANGELINE																		4	2
FRANKLIN																		2	
GRANT					2	1											2	1	
IBERIA																		5	2
IBERVILLE					3	2													

* Includes Rubella, Congenital Syndrome.

the essence of programs to improve public health. In an effort to insure effective patient follow-up where those diseases of public health importance are concerned, the State of Louisiana has incorporated a team of Communicable Disease Investigators and nurses into its health units whose responsibility it is to ferret out cases that for one reason or another have been "lost to follow-up." The ensuing case report concerning a New Orleans infant with congenital syphilis illustrates a few of the areas in which this network of investigators can be of service to the practicing physician in providing comprehensive care to his patients. It also provides timely insight into a preeminent public health problem, the problem of venereal disease:

> On January 17, 1973, a twenty-three year old woman gave birth to a 2 lb. 12 oz. infant at Charity Hospital of New Orleans. X-rays of the child's long bones revealed changes compatible with congenital syphilis. Blood obtained from the mother and infant shortly after delivery revealed VDRL titers of 1:32 and 1:128, respectively. These combined with reactive Flourescent Treponemal Antibody (FTA) Tests for both mother and child confirmed the diagnosis of early latent syphilis (less than one year) in the mother and congenital lues in her child.
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> The infant received 100,000 u/kg of body weight penicillin G divided into daily dosage over a 10-day period. The mother received 2.4 million units of intramuscular benzathine penicillin G at one clinic session.
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> On January 19, 1973, a VD investigator from the Health Department interviewed the mother at Charity Hospital. From her he learned that she had visited her personal physician on August 1, 1972. The purpose of this visit had been to determine whether or not she was pregnant. On that day she had a routine serologic test for syphilis. She also stated that during the course of her visit she had complained of a rash on the palms of her hands. She subsequently learned from her physician that she was pregnant, but stated that at no time received notification of the results of her blood test or any indication that she had syphilis.
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> Following the interview, the VD investigator visited the private laboratory which had performed the mother's "routine serological test for syphilis." He learned that the test employed by this laboratory was the RPR (Rapid Plasma Reagin) circle card test. The patient's test had been performed on August 17 and had been reported as reactive. In spite of the fact that a medical technologist at the laboratory stated that all RPR card tests were routinely confirmed by the State Laboratory in New Orleans, an extensive search of the State Laboratory records failed to produce any evidence that a specimen of the mother's blood had ever been received.
>
> The VD representative then contacted the patient's private physician. From him he learned that the mother did not return to his office following her initial visit, nor did she pay her bill.

There are many lessons to be learned from this case report. One lesson is that syphilis is not a disease which readily lends itself to diagnosis via the "routine laboratory test." "Routine" blood tests, as their name implies, are all too often ordered and recorded mechanically without any effort on the part of the physician to interpret their significance. In fact, the results may never even come to the physician's attention. One can easily imagine a secretary filing our unfortunate mother's laboratory results in her chart to be seen by the physician at the time of the patient's next clinic visit which never materialized. But then, a presumptive diagnosis could and should have been made in spite of the "routine blood test." The patient's history of a palmar rash was as good an indicator of disease as any syphilis screening test.

This in not to say that the laboratory tests are not of value in evaluating a patient for syphilis. Taken in perspective with the patient's history and physical examination, these are invaluable in confirming the diagnosis of syphilis. Dark field identification of the treponeme in the primary or secondary lesion provides pathognomonic evidence for disease. The woman discussed above, however, had progressed to the early latent phase of disease at the time of her 1st medical visit. In this phase, one must look to the serological tests for laboratory confirmation.

Three serological tests were employed in evaluating the mother and child discussed above: The RPR Circle Card test, the quantitative VDRL and the FTA test. Although there are hundreds of tests for syphilis, these are representative of the major groups currently employed. The RPR Circle Card and the VDRL, unlike the FTA are nontreponemal tests. These are also known as reagin tests since they measure the antibody (reagin) which reacts with purified beef heart extract (cardiolipin-lecithin). These are the best tests for following response to therapy. Titers should become nonreactive in 6 to 12 months following treatment for primary syphilis and in 12 to 18 months after treatment for secondary syphilis. Treatment of a latent or late infection

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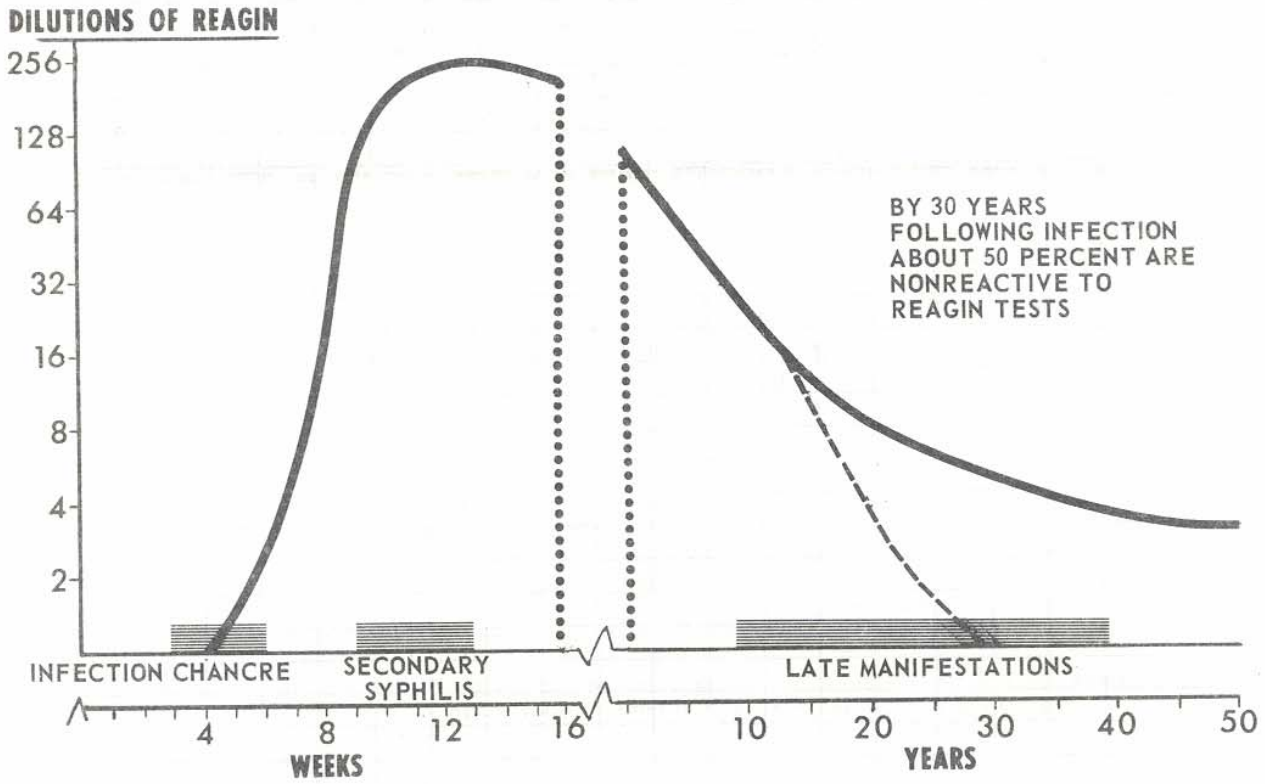
JACKSON										1								2	
JEFFERSON	2				5	4					1		2		4			97	8
JEFFERSON DAVIS			1		1													16	
LAFAYETTE	1				2	1	1					1						37	
LAFOURCHE					1													8	
LASALLE																			
LINCOLN																		65	2
LIVINGSTON						1											4		
MADISON																		11	
MOREHOUSE																		14	
NATCHITOCHES						1												19	
ORLEANS	3		1	2	26	13					4		7		4	1	2	724	30
OUACHITA					7	4												67	
PLAQUEMINES						1												1	
POINTE COUPEE																			
RAPIDES						3	3					28						90	1
RED RIVER																			
RICHLAND						1		1										12	1
SABINE																		6	
ST. BERNARD	1				1												1	3	
ST. CHARLES																	2	8	
ST. HELENA																		1	
ST. JAMES																			1
ST. JOHN																		2	1
ST. LANDRY						1												23	
ST. MARTIN							1											5	
ST. MARY						1												4	
ST. TAMMANY					4													25	
TANGIPAHOA																		20	2
TENSAS																			1
TERREBONNE					1	1												6	2
UNION																		8	2
VERMILION						1												6	
VERNON			1		1													70	1
WASHINGTON																		14	
WEBSTER																		6	1
WEST BATON ROUGE																		2	
WEST CARROLL																		4	
WEST FELICIANA																		3	
WINN																		4	
OUT OF STATE																			

From January 1 through April 30, the following cases were also reported: 1-Actinomycosis; 3-Brucellosis; 1-Malaria (contracted outside the U.S.A.)

usually has little or no effect on the titer and should not be used to gauge the adequacy of treatment. The accompanying graph illustrates the serologic picture as monitored by the nontreponemal tests in those syphilitics who remain untreated (See Graph).

Serology of Untreated Syphilis



The FTA test, unlike those mentioned above, is a treponemal antigen test. It employs as antigen, dead T. pallidum which are allowed to dry on a slide. This is overlaid with the unknown serum which, if containing antibodies to T. pallidum, will adhere and cover the organism with an invisible layer. This is then treated with fluorescein-tagged antibody to human globulin. If the globulin (syphilitic antibody) coats the treponeme, the tagged material reacts with it and the treponeme will fluoresce when viewed under ultra violet light. No fluorescence is observed if syphilitic antibody is absent.

The FTA test is primarily used as a confirmatory test in diagnostic problem cases; e.g. patients in whom the clinical, historical, or epidemiological evidence of syphilis is equivocal. The FTA test employed in the evaluation of the woman and infant under discussion was therefore superfluous.

Since reagin and treponemal antibodies both readily cross the placental barrier, the diagnosis of congenital lues may be difficult to differentiate from simple passive transfer of antibodies from mother to infant. The higher the titer of the mother's blood, the greater the chance that the newborn's serological test will be reactive. However, if this is due to passive transfer of antibody the child's titer should not exceed the mother's as did this child's. Furthermore, a reactive serological test in the newborn, due to passive transfer, should revert to non-reactive by 3-4 months of age; if it has not, active infection of the newborn is strongly suggested. A rising titer is diagnostic.

A final lesson to be learned from our case report concerns the role of the Health Department's VD investigator

in assisting the practicing physician in achieving case follow-ups. This was an unnecessary case of congenital lues which could have been prevented if the local VD investigator had been notified of this mother's history of serology at the time of her initial prenatal visit. Notification could have originated from any one of a number of people. The private laboratory that performed the initial RPR Circle Card (a reagin screening test) should automatically have forwarded a split specimen to the State Laboratory for the quantitative VDRL determination. Had this been done, a copy of the reactive results would have been forwarded to the local VD investigator and an investigation undertaken automatically. This was, however, not done and is frequently not done because private laboratories throughout the state do not always forward reactive specimens to the State Laboratory for confirmation.

The physician's secretary might have noted this patient's reactive RPR and notified the local health department. It's unlikely, however, that she "routinely" did anything more than file these results in the proper folder.

The final responsibility for responding to the patient's history of a palmar rash accompanied by a reactive RPR has to be with the physician who first examined this woman. When the woman did not return for "follow-up" (for any one of the reasons already listed) the onus of responsibility was not removed from her physician. The Health Department has VD investigators assigned to every parish health unit, any one of whom might, if alerted, have contacted this woman, seen to her treatment, investigated her sexual contacts and, in turn, brought these to proper medical attention. Had this been done, an unfortunate and inexcusable case of congenital lues would not have occurred.

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