

## Early Acute Syphilitic Benign Hepatitis: A Case Report

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WITH the advent of intensive penicillin therapy, the clinical manifestations of early syphilis apparently have reached a significant low compared to the myriad of clinically recognized entities in the pre-penicillin era. One would expect, inasmuch as the liver is an integral part of the cardio-vascular system, that in the presence of an overwhelming syphilo-toxemia, the incidence of hepatic involvement should be reasonably high. Quite the contrary, it is apparently the experience of a number of syphilologists that early acute benign hepatitis due to syphilis is a rarity. It is estimated that it occurs in from 0.37 to 3 per cent as a complication of the florid eruptive stage of syphilis.<sup>1</sup> The chief symptom apparently is jaundice; the chief sign, enlargement of the liver. Weight loss to the point of emaciation may occur and the diagnosis rests on finding a secondary syphilitic eruption, a Herxheimer soon after the initiation of therapy with penicillin, and complete recovery, subjectively and objectively, in three to five weeks.

### CASE

A twenty-one year old colored girl was admitted to the hospital on June 27th, 1949 with a chief complaint of "a rash on my body, vomiting and pain in my stomach." These symptoms had been present for two to three weeks, increasing in severity. Physical examination was essentially negative with the exception of the presence of many annulo-papular, flat, erythematous lesions present on the upper extremities and chest, with a few scattered lesions over the lower extremities, the abdomen and buttocks. There were mucous patches present in the mouth. Her blood pressure was normal and she had a temperature of 100 degrees. The patient complained of weakness, fatigue, dizziness, and anorexia. There was marked tenderness to palpation in the epigastrium and she was definitely jaundiced. There was a yellowish discoloration of the sclerae and a yellowish tint to the skin. The urine was dark brown in color and contained both bile and bile pigment and a 2 plus albumen. Her prothrombin was 87 per cent on June 30th and 62 per cent on July 7th. A blood serology done on June 29th was reported as: Kolmer 4+ and Kline 4+. A repeat study on July 7th showed a Kline 4+ and Kahn 128 units. A dark field specimen from one of the skin lesions was found to be laden with spirochetes. Her laboratory data during her hospitalization was as follows:

<i>Test</i>	<i>Date</i>	<i>Result</i>	<i>Remarks</i>
STS .....	6-29-49	Kolmer 4+ Kline 4+	Significant Titre
	7-7-49	Kahn 128 units Kline 4+	
Prothrombin .....	6-30-49	87%	Note drop in level prior to initiation of therapy
	7-7-49	62%	
Serum Bilirubin .....	6-28-49	13.0	Note fall in bilirubin toward normal by end of therapy
	7-7-49	4.38	
	7-19-49	2.40	
Cephalin Flocc. ....	6-30-49	+4	Evidence of marked liver damage
	7-17-49	+4	
Thymol Flocc. ....	7-2-49	+5	Further evidence of severe liver impairment
	7-17-49	+4	
Thymol Turbidity .....	7-2-49	10.5	Indicative of liver impairment

The diagnosis made was secondary syphilis with an associated acute benign syphilitic hepatitis.

Course in the hospital: The patient was treated with 600,000 units of procaine penicillin daily for ten days and a high vitamin, glucose and protein intake. Within twelve hours after her first injection of penicillin the patient spiked a temperature which hovered between 103 and 104 degrees. Therapy was continued and the temperature dropped gradually to normal. Her skin eruption and associated jaundice had disappeared at the time of her discharge on July 18, 1949. Her diagnosis was secondary syphilis and syphilitic hepatitis with an associated Herxheimer reaction.

#### COMMENTS

There is no doubt but that we dealt with a syphilitic hepatitis. It is more than likely that a significant number of sub-clinical types of this disease probably go unrecognized. At the time of discharge this patient was clinically well. Her skin had returned to its normal color and there was no jaundice appreciable. The patient was not cooperative and we were unable to get her back for follow-up examinations in the clinic where we had hoped to

repeat some of these liver function studies. The next occasion that I had to see this patient was in March 1952 when she came to my attention for evaluation of her syphilitic status while a prisoner at the House of Correction in Philadelphia. Clinically, she was entirely negative. Serologic tests for syphilis done at this time revealed: Kolmer 211D, Kline 2 on two occasions. A spinal fluid examination done at this time revealed Kolmer and Kline negative, Gold 0000000000, cell count—1 cell (lymphocyte), total protein—39 milligrams per cent. This patient is presented as an interesting case of acute benign syphilitic hepatitis with an associated Herxheimer reaction and secondary syphilitic lesions, probably adequately treated with an apparently slow, but progressive improvement in her serologic titre.

#### LITERATURE CITED

1. STOKES, BEERMAN, INGRAHAM: *Modern Clinical Syphilology*, 3rd Edition, Saunders Co., Philadelphia and London. 1944.

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#### MEDICAL EDUCATION COSTS

Medical schools in the United States spent an estimated \$110 million in the fiscal year 1951-52. Of this, \$76.2 million was for basic operating expenses: instruction, administration, and other general expenses, operation and maintenance of physical plant, and libraries. The remaining \$33.8 million was for research, budgeted separately and financed primarily from funds received from such sources as Federal agencies, private foundations and associations, and industry. These expenses do not include the cost of separately organized postgraduate education and of hospitals and clinics.

The income of these schools from tuition, fees, and special training grants was estimated to be \$21.4 million. This does not include income from State appropriations, university transfers, endowment, or other sources. Grants from outside agencies for specially budgeted research equalled the estimated expenditures of \$33.8 million.

There were 27,076 undergraduate medical students enrolled in the 79 schools—26,515 in the seventy-two 4-year schools and 561 in the seven 2-year schools of basic science. In addition, the medical schools were responsible for instruction of 55,437 other students enrolled for advanced degrees, taking continuation or refresher courses, or getting instruction in the basic medical sciences as part of their nursing, dental, pharmaceutical, or other training.

Expenses of medical schools in 1952-53 are estimated to be \$5.4 million higher than in 1951-52. The total of \$115.4 million represents \$82.2 million for basic operating expense and \$33.2 million for separately budgeted research.

To meet these basic operating expenses the schools expect to receive \$17.4 million from tuition and fees, and \$38.2 million in grants, either as special teaching grants or from outside agencies for research. *The President's Commission on the Health Needs of the Nation*, Vol. 4, pp. 224-225.