

BODY OF REPORT

SEATO Medic Study No. 93 Studies on the Pathology of Liver Diseases in Thailand: A Survey of the Frequency and Classification of Types of Liver Disease in Thailand.

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 Division of Medical Research Laboratories

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Objective: The objective of this study is to determine the frequency of various types of liver diseases as observed in two large general hospitals in Bangkok, Siriraj and Vajira Hospitals. The diagnosis of liver disease is based in every case on the morphologic findings in conjunction with the clinical and biochemical data.

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Description: To accomplish this study, a registry of liver biopsy was established at the Department of Pathology. Biopsies from all cases of known or suspected liver diseases were submitted to the registry with appropriate blood or serum for liver function studies. Cases were then traced back to the wards of the two hospitals and complete history and clinical data were recorded on special protocols by the research fellow and assistant. The criteria for making a pathological diagnosis in general followed those of Popper and Schaffner in their monograph "Liver - Structures and Function".

During the period covered by this annual report, 616 biopsies of the liver were performed from the two hospitals, and adequate tissue was obtained in 579 cases. The various types of liver diseases encountered are as follows:

I. Cirrhosis, fibrosis and related lesions.	Total (129)
1.1. Post necrotic cirrhosis	35
1.2. Portal cirrhosis	5
1.3. Biliary cirrhosis	3
1.4. Cirrhosis, exact type not determined	16
1.5. Fibrosis	
1.5.1. Periportal fibrosis	28
1.5.2. Biliary fibrosis	8
1.5.3. Focal fibrosis	1
1.5.4. Perihepatic fibrosis	2
1.6. Nutritional liver injury	
1.6.1. Fatty metamorphosis	21
1.6.2. Florid cirrhosis	9
1.6.3. Actue alcoholic hepatic necrosis	1
II. Malignancy	Total (146)
2.1. Liver cell carcinoma	
2.1.1. Liver cell carcinoma without cirrhosis	47
2.1.2. Liver cell carcinoma with cirrhosis	31
2.1.3. Liver cell carcinoma with opisthorc- hiasis	4
2.2. Adenocarcinoma	
2.2.1. Cholangiocarcinoma	4
2.2.2. Cholangiocarcinoma with opisthorc- hiasis	7
2.2.3. Adenocarcinoma-metastic	50
2.3. Leukemia	3
III. Infection, inflammation and related disorders	(183)
3.1. Hepatitides (all forms)	110
3.2. Massive hepatic necrosis	1
3.3. Leptospirosis	21
3.4. Malarial pigmentation and malarial hepatitis	17
3.5. Granulomata	

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3.5.1. Sarcoidosis		1
3.5.2. Nature undetermined		3
3.6. Amebiasis		5
3.7. Bacterial cholangitis		4
3.8. Opisthorchiasis		16
3.9. Drug hepatic injury		1
3.10. Inflammation, unclassified		4
IV. Hematologic conditions	Total	(23)
4.1. Thalassemia major		1
4.2. Thalassemia Hb E disease		4
4.3. Thalassemia Hb H disease		6
4.4. Hemolytic anemias		3
4.5. Hemosiderosis, nature unknown		6
4.6. Miscellaneous conditions		7
V. Cholestasis	Total	(31)
5.1. Intrahepatic cholestasis		8
5.2. Cholestasis, extrahepatic		6
5.3. Cholestasis, nature undetermined		17
VI. Miscellaneous	Total	(63)
6.1. Necrosis, nature miscellaneous and unknown		7
6.2. Poisoning, (phosphorus, manganese)		2
6.3. Non specific changes		54

The collection of liver material in this project is now concluded. These data clearly show that cirrhosis and primary carcinoma of the liver represent significant chronic and neoplastic liver diseases of this population. The pathogenetic factors which may lead to these two diseases are multiple as can be gathered from the various types of diseases, or alterations of the liver whose natures in some instances are as yet unclassified. The overall findings and interpretation of this study will be presented in a manuscript for publication. Detailed histopathologic analysis of the biopsies on the following specific conditions (leptospirosis, malaria, nutritional injury of the liver and cirrhosis) will be made separately.