

THE ABNORMAL LIPOPROTEIN OF CHOLESTASIS

To the Editor: I believe that the recent and most valuable editorial by Dr. Havel regarding the present status of the studies of the abnormal lipoprotein (LP-X) accompanying cholestasis (N Engl J Med 285:578-579, 1971) needs some further clarification. His view that the protein of LP-X "may not have an important influence on the basic structure of this abnormal lipoprotein" stands in contrast to results of other studies,¹⁻³ characterizing the protein moiety and structure of LP-X. These studies indicate the importance of the specific combination and structural relation of albumin with the apo C peptides for maintaining the structure and protein-lipid composition of LP-X.

Regarding the value of the LP-X test as an aid in the differential diagnosis of jaundice, Havel's interpretation of our data⁴ seems to be misleading. In the study⁴ plasma samples of 360 patients, including newborn infants with different forms of jaundice, and 172 normal subjects were tested for LP-X, with results that were highly significant in demonstrating or excluding cholestasis. From these and from new unpublished data of more than 2500 patients it seems that the test for LP-X is superior in this regard to all

previously known blood tests. Furthermore, as recently presented,^{5,6} a combination of the LP-X test with the determination of the LCAT enzyme makes it possible to differentiate not only cholestasis from jaundice not due to cholestasis but also intrahepatic from extrahepatic cholestasis. This distinction has not been achieved by the determination of the LCAT enzyme in combination with other blood chemical tests.

The last statement by Dr. Havel — that LP-X apparently is deposited in the skin to form xanthomas — is highly speculative and so far lacking any experimental proof.

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