

Is High Blood CO a Cl To Smokers' Coronario

*Danish expert finds heavy saturation among inhale
cigarettes and cheroots; plans some animal tests*

High carbon monoxide blood saturation levels, found in venous blood of cigarette and cheroot smokers, particularly those with thromboangiitis obliterans (Buerger's disease), "displaces the entire oxygen dissociation curve significantly to the left." A Danish professor of clinical chemistry told a medical forum in Lund, Sweden, recently that this "may well explain why the coronary thrombosis rate among inhaling smokers is about three times higher than among nonsmokers."

Dr. Poul Astrup, an international expert in acid-base balance, also said he believed that the displacement of the curve due to carbon monoxide "is a neglected factor important for the development of arteriosclerosis in man."

Twenty to 21 per cent is the normal oxygen tension of venous blood in the coronary sinus, Dr. Astrup told MEDICAL TRIBUNE. But Buerger's disease patients, with 10 per cent carbon monoxide hemoglobin levels, he said, show venous blood tensions of 15 to 16 per cent for

extracting the same amount of

"This means," he said, "that the inside arterial walls, which are quite must be low, so that lesions can arise. The results, I believe, is a position to arteriosclerosis. We are doing animal experiments which I am sure will show it," he said.

Pointing out that the oxygenation curves published in 1941 by Americans, Drs. D. B. Dill and Forbes, and still widely used as a standard, were constructed largely by a single investigator, Dr. A. of Boston, in 1924, Dr. Astrup drew a new standard curve plotted at the Copenhagen University Hospital Central Laboratory, which he heads.

"It is more accurate than Boell's," a clinical chemist remarked.

Dr. Astrup said oxygen saturation values were determined at various tensions in 1,000 blood samples from normal subjects, all nonsmokers, by spectrophotometry at two different

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