

leucocytes and lymphocytes scattered in its substance. The hyaline nature of the thrombus was to a great extent the result of a degeneration of the blood elements within it. The hyaline portion of the thrombus was not rich in fibrin. At times the portal vein was also involved in a perivascular reaction similar to that about the hepatic artery. Processes of degeneration and occasional thrombosis were also seen, but the results of the inflammatory reaction did not bring about the serious consequences with dilatation and rupture that were found in the hepatic artery. In a study of the elastic tissues it was found that the degenerative process accompanying the periarteritis involved not only the musculature, but also these fibers. In the early stages the fibers were found split into several laminae and frequent interruptions in their course were seen. In the later stages a complete dissolution, in as far at least as the absence of a staining reaction indicated, occurred. Thus the severe involvement of the hepatic artery left no trace of the internal or external system of elastic fibers. In these arteries with advanced degeneration it was difficult to distinguish the line of demarcation between the hyaline thrombi and the hyaline degeneration of the arterial wall. In examining the artery in other sections it was found that during the early stages of the inflammatory process about its wall a reaction of considerable extent involved the media and intima. In some instances the reaction in the intima was unique in that it was out of proportion to the response observed in the media. Under these conditions inflammatory exudate was present in marked quantity in peripheral portions of the artery as well as beneath the endothelium of the intima. In this respect the reaction simulated much that described by McMeans in arteritis occurring in meningitis. The endothelial layer was lifted from its normal position, forming a large bleb containing lymphocytes and some leucocytes as well as evidence of fluid. Between this reaction in the intima and the periarterial inflammatory responses lay the media in which only a few wandering cells were observed. It is true that the degenerative changes occurring in the media were commonly quite out of proportion to the amount of cellular exudate present. In fact it was not uncommonly observed that extensive dissolution of the media of the nature of hyaline degeneration was present in the absence of a definite cellular response. Where the medial degeneration became more advanced there was an exfoliation of the inner loosened intima, laying bare the underlying diseased tissue. It was upon such a denuded area where fibrin thrombosis was prone to develop. The fibrin deposit not only occupied the surface of these tissues, but the threads were found to interlace the meshes of the degenerated media. Associated with these marked reactions of degeneration and inflammation the internal elastic lamina was found to become involved and show tinctorial change. Splitting of this band was common while a change of its composition became apparent in that it no longer