

chi, and products of inflammation between and outside of the air cells and bronchi. We have already seen in studying pneumonia that there is a form of inflammation in which the air cells are filled with fibrin and large, nucleated cells of epithelial character, while the bronchi are filled with pus cells. This is one of the forms of pneumonia which we meet with in phthisis. We have also seen that there is another variety of inflammation affecting the interstitial connective tissue of the lungs, and called interstitial pneumonia. All the inflammatory products found in phthisis are due to the existence of one or both of these varieties of pneumonia.

What lesions do we find then in the lungs which are undoubtedly the results of inflammation? the intra-alveolar pneumonia fills the air cells with fibrine and epithelium, and the bronchi with fibrine and pus. Wherever this takes place the lung becomes solid—hepatized. This hepatization is at first sometimes red, sometimes of a gelatinous, gray color. The absence of a first stage of red hepatization in some cases is due to the fact that the inflammation is from the commencement a chronic one, that it has no acute stage in which the blood-vessels are congested and the blood escapes. The products of inflammation thus formed frequently degenerate, then the hepatized lobules are of a more opaque gray color, or whiter, or yellow and cheesy. They may remain cheesy for an indefinite period, or they may calcify, or the walls of the air vesicles may be so compressed that they lose their vitality, become necrotic, soften, break down and form cavities. The same degenerative changes take place in the pus and fibrine which fill the small bronchi.

The extra-alveolar or interstitial pneumonia results in the production of new fibrous tissue. This new tissue is sometimes dense and hard, composed of fibrillated connective tissue with few cells, sometimes is softer and looser, sometimes is composed of reticulate connective tissue. It resembles closely the new fibrous tissue which is produced in other parts of the body by chronic inflammation. This new tissue is found thickening the pulmonary pleura, surrounding the bronchi and blood-vessels, traversing the lung in broad bands, moting it with large patches or with minute nodules. It is either white, gray, or black in color.

When in the same lung both the intra-alveolar and the extra-alveolar forms of pneumonia continue as a chronic disease for years, the inflammatory products which result modify each other and give rise to a great variety of lesions. It is these complicated lesions which it is so difficult to distinguish from tubercle. *New York Medical Record.*

INTERNAL HEMORRHOIDS.

*** The next case, Gentlemen, to which I will invite your attention, is one of hemorrhoids, or piles, as they are commonly termed. The man's history is the following:—

He is sixty years of age, and has suffered, he says, for thirty years with an enlargement or protrusion from the anus. During the last ten years these tumors have bled, and bled profusely. This

aggravated hemorrhage has occurred every three or four weeks, but in the intervals there has always been more or less loss of blood. As a result of this constant drain, his constitution has suffered severely; he is weak and feeble, possesses no energy, and is unable, as he assures me, to earn his living. He has, therefore, sought the shelter of this Institution, in the hope of being cured.

Now before I proceed to the examination and treatment of this case, let me briefly explain to you the causes and pathology of this troublesome affection. In the first place, what are hemorrhoids? The derivation of the term is from the two Greek words *Hæma*, blood, and *Reo*, to flow, and signifies, therefore, literally, a flow or flux of blood. But all piles do not bleed; and they have therefore been variously subdivided at different times and by different writers.

In the first place, there is the classification into the "blind piles," hemorrhoides cecæ, and the "open or bleeding" pile, hemorrhoides apertæ, and these are the terms which have been largely employed by the older surgeons. Another classification, and perhaps the more common, is that into internal and external piles, according as the tumor is developed above or within, or below and external to the external sphincter ani muscle. The former, the internal pile, which is often accompanied by bleeding, corresponds with the open pile of the ancient surgeons.

And now let me say a few words relative to the character of a hemorrhoid. Essentially, hemorrhoids depend upon a varicose condition of the veins of the rectum, at all events, in their incipient stages. You know, perhaps, that the lower part of the rectum is supplied with blood through three channels; the superior, middle, and inferior hemorrhoidal arteries. The first named vessel is given off by the inferior mesenteric; the second by the internal iliac, and the last named by the internal pudic arteries. These different hemorrhoidal arteries are accompanied by their respective veins. As a consequence, the blood from the rectum finds its way back into the general circulation through three channels, to wit, the internal iliac, internal pudic, and inferior mesenteric trunks. The latter, as it ascends, pours its blood into the portal vein, and passes through the liver.

You will thus understand, I trust, how it happens that the superior hemorrhoidal vein, a vein of considerable length, destitute of valves, and entering into the composition of the portal system, may at any time be subjected to the general disturbing hepatic influences which tend to produce portal congestion. And you will also see how, such portal congestion having occurred, we may have interference exerted upon the return of the blood from the rectum through the medium of the superior hemorrhoidal, and its prolongation, the inferior mesenteric veins. This distribution of the rectal veins and arteries will be more clear, if you glance for a moment at this exaggerated diagram in colors, (demonstration made by the lecturer).

Now, Gentlemen, let us suppose that from any cause, whether portal disturbance, the result of liver trouble, or from constipation, and the accumulated