

In the cases thus far reported the left heart has been most affected, and aortic valve more than the mitral, though any of them may be involved. Pericarditis is rare, though some cases have been reported.

Myocardial changes, such as necroses, embolism and abscesses are common in gonorrhœal septicæmia, though they are generally secondary to endocarditis.

Councilman reports one case in which myocardial abscesses existed without endocarditis.

No marked changes in the arterial system have so far been described, but slight alterations and thromboses in retinal veins have been ascribed to gonorrhœa in men free from syphilis, or other probable causes for vascular disease. Many cases of phlebitis in lower extremities have been reported.

The most frequent complications are no doubt the rheumatic, which may occur at most any stage, but ordinarily after the 3rd week, when the discharge is subacute and also may follow ophthalmia neonatorum.

It may manifest itself in any of these ways:—

1. Arthralgia.
2. Synovitis.
3. Arthritis.

In the first, we have simply temporary fugitive pains in or about the joints with no signs of inflammation.

When the synovial membrane is attacked, the effusion is intra-articular and resembles that of a traumatic synovitis.

In the arthritis the periarticular structures chiefly are involved, with serous or sero-purulent effusion in the tendon sheath, producing much swelling and redness, the ligaments are softened and displacement may occur.

Suppuration may take place, with extensive destruction of all tissues involved, Osier calls this the most destructive and disabling of all complications of gonorrhœa. It may be mono or poly articular, in one series three or more joints were involved more than 175 times and one joint only 56 times.

In Dr. Stewart's series, the knees were most often involved, then the ankles, small joints of feet, wrists and small joints of hand.

Endocarditis is not very often associated with the rheumatic condition.

Perichondritis, especially of the costal cartilages is not uncommon and inflammation of the tendons especially tendo achilles is often seen. Flat foot is commonly produced by softening and relaxation of the ligamentous structures in the sole.

Abscesses about the tarsus and peroneal tendons have been reported by Almqvist.