Medical Matters.

SYPHILIS AND ANEURYSM.

Sir William Osler, M.D., F.R.S., Regius Professor of Medicine at Oxford, took for the subject of the Schorstein Lecture, which he delivered at the London Hospital last month, the subject of "Syphilis and Aneurysm." We quote from the *British Medical Journal* portions of this lecture, which deserves careful study in its entirety.

Syphilis has been one of the great riddles of the race. For generations, it shared with malaria the peculiarity that we knew the cure without knowing the exact cause. And now, after long years of patient research, the riddle of its origin has been read, and the brilliant work of the much-lamented Schaudinn has opened a new and hopeful chapter in the history of one of the greatest of human scourges. Already the discovery has placed in our hands a means of diagnosis, early and late, which cannot fail to add efficiency to our treatment.

Syphilis kills in three ways and at three periods. Almost without exception the acute infections spare the child *in utero*, but this one takes a heavy toll of the unborn, and we may estimate that of the unnumbered, and as yet unregistered, stillbirths, more than one-half are due to it. The 1,658 deaths in 1907 form a second group; a majority were in children under five years of age, but practically all succumbed to the direct lesions of the disease, and this group alone appears in the register under the heading of syphilis. But it is not with syphilis as with other infections, most of which come in sharp assaults, and once defeated the enemy retires.

The worm that never dieth and the fire that is never quenched express in simile the only too frequent story of the syphilitic infection.

There remains to be considered another affection, the association of which with syphilis has been long under discussion. New researches have led to new methods of diagnosis, and they should enable us to settle once for all the vexed problem of the rôle played by syphilis in producing arterial disease, and more particularly that of the aorta.

SYPHILITIC AORTITIS.

Professor Osler proceeded to state that the basic change which makes aneurysm possible is a mesaortitis, which may, as a rule, be readily distinguished from the ordinary atheromatous process. First, it is localised, involving an area of an inch or more of the tube very commonly the first part of the arch, with which the valves are often implicated.

Secondly, the appearance of the vessel differs strikingly from that seen in the ordinary degenerative atheroma. In typical cases, the appearance is that now known as cicatricial, or fibrous, aortitis. Thirdly, the adventitia shows areas of cell infiltration, particularly about the vasa vasorum, and spreading into the media along their course. Many of the smaller vessels show the obliterative endarteritis. Fourthly, the intima is in places atrophic along the lineal depression, but more frequently shows compensatory thickening, but there is rarely calcification. And, lastly, the spirochaetes of syphilis-have been demonstrated in the sections.

Moreover, in young and middle-aged men the syphilitic form often presents a triad of symptoms—angina pectoris, aortic insufficiency, and aneurysm. This special type of mesaortitis is very prone to affect the root of the aorta.

CONCLUSION.

The practical question remains, What can we do to restrain the ravages of syphilis, and so reduce the proportion of deaths from aneurysm and other diseases directly due to it? At a low estimate, we may place the mortality at between 6,000 and 7,000 annually, about 1 in 80 of the deaths, not taking into account the unestimated and very large number of stillbirths. In about one-seventh of the cases the deaths are due to what we regard as the more direct effects of the disease; aneurysm and the enormous group of affections of the nervous system represent later, but none the less definite, effects of the poison. The Wassermann reaction and the detection of the spirochaetes gives an entirely new aspect to the disease, and obliterates in great measure old distinctions and divisions. There is only one syphilis, one and indivisible, with many manifestations.

The discovery of the cause is the first step towards successful measures for the prevention of an infectious disease. So far as venereal disease is concerned, our attitude has been one of hopeless inactivity, partly owing to inherent difficulties, partly to a lack of courage. The innate difficulty relates to the problem of controlling one of the two great primal appetites. No measures yet devised have successfully restricted illicit intercourse between the sexes. Prostitution, the blackest blot in our civilisation, exacts a ghastly toll of suffering, and a sacrifice annually of thousands of lives. Add to the 6,000 or 7,000 slain by the spirochaete the thousands maimed and killed by the gonococcus—a David among cocci—and the sum total debited the venereal infections reaches figures only behind those of tubercu-



