

William III., the hero of a hundred battle-fields, who, when over eighty years of age, commanded the army in Ireland under circumstances of privation, pestilence and anxiety such as might well have sapped the resolution of a younger man.

The causes of arteriosclerosis are quite as obscure as any chapter in the etiology of medicine. As has already been pointed out, it is difficult to distinguish cause from effect. There can be no extensive arteriosclerosis without a rise in blood pressure, and this may lead to changes in the organs. Toxemia in some form is unquestionably the cause of the majority of cases. It may have its origin in defective elimination, or be the product of the acute or chronic infections. Syphilis is a frequent cause of arteriosclerosis. Whether there is a difference between the sclerosis of syphilis and that due to other causes is an unsettled fact. In some cases there is an endarteritis that may be termed specific, and over which specific treatment exerts considerable influence. These cases usually occur within ten years of the primary infection. Syphilitics suffer from early arterial changes strikingly like those which occur in the aged, and which do not yield to specific treatment. We may conclude that syphilis acts as a predisposing cause of arteriosclerosis, as well as having a distinct endarteritis, the latter alone yielding to antisyphilitic remedies.

Defective elimination is the direct cause in the majority of cases. Apoplexy is one of the commonest results of arteriosclerosis, and this has been commonly ascribed to plethora and a full habit. This dictum must be modified, as the figures show that a large number of those suffering from apoplexy are spare. A red face and sanguine temperament are not specially indicative of apoplexy, only in so far as they indicate a too-liberal consumption of food. As a rule the spare individual of bilious temperament suffers more degeneration, providing he is a liberal feeder, than does the one who accumulates flesh. Uric acid has become the fashionable scapegoat. If we mean by this simply defective elimination, we shall have a broader conception of the underlying principles. This furnishes the explanation of the development of arterial disease in the aged: the eliminative organs become less efficient, and there is an accumulation of waste products which excites a proliferation in the connective tissue of the smaller arteries.

The acute diseases are charged with causing arteriosclerosis, but they play a secondary rôle. Scarlet fever, typhoid and other infections probably do not last long