

with us, and were it not for our inherent immunity or resistance to them, our existence would be a short one.

It is also granted that small but constant doses of toxin tend to break down immunity, while large doses as in the acute diseases like typhoid, pneumonia, etc., tend to produce immunity, and it is by such efforts on nature's part that health is finally restored.

The infections observed, as having relation to these rheumatic conditions, are essentially chronic, and can often be demonstrated to have been present for years previous to the onset of their systemic expression, in the way of an arthritis or so-called rheumatism.

Further, this systemic expression of a local disease, may frequently occur following an injury, exposure to cold or wet, or, in fact, any circumstance which tends to suddenly lower the general resistance of the body. Consequently, the tributary cause often receives the blame, while the underlying, and ever present, original cause is overlooked.

As indicated the infective foci may be varied, but attention will be directed especially to mouth infection. Of these we will consider:

Infections resulting from

(A) Teeth proper,

- (1) Caries of teeth,
- (2) Buried roots,
- (3) Crowned teeth,
- (4) Bridges.

(B) Gums and alveolar processes,

- (1) Pyorrhoea,
- (2) Alveolar osteo-myelitis

In caries of the teeth, not infrequently, the pulp becomes infected, in fact, this may be considered the rule where much destruction exists, and the familiar gumboil is a common expression of this condition where the infection is sufficiently acute to make its way through the alveolar process. Where infection is less virulent, the subject of such a condition may not be so fortunate, as I shall endeavor to demonstrate. Quite frequently instead of finding an exit through the alveolar process a chronic abscess is harbored at the base of the tooth, and this without subjective symptoms of its presence.

To show further this tendency to chronic abscess formation in bony structures, and their existence over a period of years with very slight symptoms, Fig. 1 illustrates an abscess in the tibia of a girl 17 years old, which had been present for four years, but not until then were symptoms sufficiently acute to demand treatment. At operation the pus removed gave pure culture of *straphylococcus albus*. In two other patients similar conditions in bones of the foot and leg observed within a year would show that they may not be considered entirely a rarity.