

most interesting article in which the following statistics are quoted:—In 78 cases of Anterior Metatarsalgia pain was referred to the fourth metatarso-phalangeal articulation in 60; to the third and fourth in 6; to the second, third and fourth in 6, and in but six was the fourth articulation free from pain.

Whitman also drew attention to the paper of Robert Jones, of Liverpool, written in 1897, which recognized the depression of the anterior arch as the cause of the symptoms and also that "the characteristic pain was not caused by pinching of the nerves, Morton's theory, because the metatarsal bones are separated when the arch is depressed; but it was the result of the direct downward pressure of the misplaced bones upon the plantar nerves in the sole of the foot, practically Woodruff's theory" or, I believe, Pollosson's and Roughton's theory.

In the last edition of his text-book Whitman points out that Anterior Metatarsalgia is far more common in private than in hospital practice. The average age of the patient in the reported cases was thirty years. It is more frequent in females than in males, and frequently the sufferers are of an extremely neurotic type. The affection is frequently extremely chronic in duration.

An interesting feature is that pain, when referred, usually extends up the dorsum of the foot towards the sciatic. Doctor Guthrie described it as extending up the nerves of the outer side of the foot and leg to the sciatic. This is of interest, demonstrating as it does, that the affection is evidently not a "plantar neuralgia" in that it is not primarily an affection of the plantar nerves.

*Anatomy.*—The anterior or transverse metatarsal arch is shown on the outer side of the foot as a depression on the outer side of the great toe. When weight is borne this depression is obliterated. When the arch is weakened or broken down the natural resiliency is lost. The centre of the arch may not only be normally depressed, but, perhaps, fixed in a position of depression.

Weakness of the anterior arch is like weakness of the posterior arch in that great pain may be seen with little deformity, or conversely, little pain with great deformity.

Depression of the anterior arch predisposes to pain because of pressure on a persistently depressed articulation and, as Whitman has explained, because the metatarso-phalangeal joints of an habitually depressed arch are exposed to the direct lateral compression of a narrow or ill-shaped shoe.

*Pathology.*—Morton and his immediate successors, as we have seen, believed that the symptoms were due to a pinching of the interosseous