

### DEFINITION

1. **Hallux Valgus** is a deformity of the foot characterized by deviation of the great toe towards the midline of the foot.
2. The proximal phalanx of the great toe forms an angle with the first metatarsal bone and this angulation progressively increases due to shortening and contracture of the long extensor and adductor tendons, which function at a disadvantage in consequence of the angulation. Ultimately, the base of the proximal phalanx is displaced so far laterally that it articulates solely with the lateral condyle of the first metatarsal head. The medial condyle remains as a prominence on the medial side of the foot and, being subjected to friction and pressure from footwear, causes a bursa to form together with a corn or callosity on the overlying skin. The projecting bone, the bursa and the corn or callosity are collectively known as a **bunion**.

### CLINICAL MANIFESTATIONS

3. Many people with hallux valgus suffer relatively little trouble until complications supervene.
4. Symptoms are rare in childhood or adolescence and subjects who present for advice or treatment are usually females at or past middle age.
5. The early symptoms arise from tenderness over a bunion. Later symptoms arise from osteoarthritis of the first metatarso-phalangeal joint and from flattening of the anterior transverse arch of the foot with callosity formation.

### AETIOLOGY

6. In the course of normal development of the foetus, the first metatarsal bone of the foot is drawn laterally from an abducted position to become parallel with its neighbours thus losing the mobility possessed by that bone in the primitive foot of the ape. The bone also grows a length until it outstrips its fellows.
7. A common developmental anomaly occurs in which the first metatarsal bone remains in the abducted position thus leaving a palpable and radiologically demonstrable gap between the heads of the 1st and 2nd metatarsal bones. The first metatarsal bone may also be shorter than normal. Most observers agree that this anomaly, usually bilateral, is the commonest cause of hallux valgus although others have argued that it is the lateral deviation of the great toe, which occurs first. There is not, at present, enough evidence to determine which of the two deformities is the primary one.
8. Hallux Valgus may be caused – or, if already present, be worsened – by the use of badly designed and ill-fitting footwear leading to squeezing of the toes together with increased load on the intermediate metatarsal heads. An existing Hallux Valgus may also be worsened by prolonged standing and/or walking.

## **CONCLUSION**

9. Hallux Valgus commonly, but not invariably, arises as a result of a developmental anomaly. It may be brought about or its course adversely affected by the use of incorrect footwear. Prolonged standing and walking may adversely affect the condition, once present.

## **REFERENCES**

Duthie Robert B and Bentley George. Mercer's Orthopaedic Surgery. 8<sup>th</sup> Ed. 1983. London. Edward Arnold.

Turek Samuel L. Orthopaedics. Principles and Their Application. 4<sup>th</sup> Ed. 1984. Philadelphia. J B Lippincott Company. p1440 –1445.

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