Hallux Valgus (HV)
A Clinical Management Guideline

Etiology:
Hallux valgus (HV), also known as a bunion, is defined as a medial deviation of the 1st metatarsal head along with lateral deviation of the hallux. The underlying cause of HV is unknown, but biomechanical instability, structural deformity, traumatic compromise, and neuromuscular and/or arthritic conditions are factors that are known to contribute to HV development. Gender and age are the most common risk factors, with females and the older adult population being more at risk for this condition.

Prognosis/Harm:
Since hallux valgus is a progressive disorder, deformity will worsen until corrected by surgery, and research shows patients achieve appreciable gains following surgical intervention. A greater preoperative hallux valgus angle is believed to be a predictor of reoccurrence for those who have undergone surgical interventions. The underlying reason for recurrence is multifactorial. Hallux valgus is linked to foot pain and can lead to poor balance, gait pattern impairments and falls in older adults.

Diagnosis:
Screen for red flags and psychosocial factors:
Recent trauma, unexplained weight loss, history of cancer, drug abuse, immunosuppressed condition, neurological deficits, bowel/bladder deficits, fear avoidance, pain catastrophizing, and high perceived disability, fracture

Radiographs are used to confirm clinical diagnosis. The following radiographs are used to identify the severity of hallux valgus, measure hallux valgus angle (HVA), and to determine the type of surgical intervention needed:
- Weightbearing dorsoplantar foot radiographs
- Weightbearing lateral foot radiographs
- Weightbearing sesamoid axial view radiograph

Blood and urine tests are used to rule out rheumatoid arthritis, diabetes, collagen vascular diseases, and gout.

Evidence-Supported Interventions:
The HVA is the best predictor for determining what surgical intervention is necessary. The HVA is used to determine HV severity and the risk for reoccurrence or subluxation of the 1st metatarsophalangeal joint. The current best evidence does not include a specific treatment protocol for the non-conservative management of HV. In one study that compared the use of manual and mobilization techniques (MMTs) and night splints, there was less regression for painful symptoms caused by HV over the duration of one month for the MMT group compared to the group wearing the generic night splints who did not receive the physical therapy (PT) intervention. Therefore, the use of MMTs for the foot and ankle play a role in minimizing symptoms provoked by HV longer than those not participating in PT.
References


