SURGICAL CONSIDERATIONS IN THE REPAIR OF RECURRENT HALLUX ABDUCTO VALGUS DEFORMITY

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Maintaining surgical realignment of the chronically subluxed or dislocated joint requires proper understanding and application of the principles of muscle balance and joint congruity. Lasting correction will be obtained only by the elimination or control of deforming forces that initiated the malalignment. Recurrence of hallux abducto valgus can usually be related to a lack of adequate structural repair, inadequate control of deforming forces, or a combination of the two. Inadequate structural repairs, in general, tend to rapidly show recurrence. Typically, lack of muscle balance or control of deforming forces will result in a more delayed reappearance of the disorder. A brief classification based on the duration of the interval between the correction and the recurrence of a specific hallux abducto valgus deformity is presented.

IDENTIFICATION OF THE RECURRENT DEFORMITY

Even seemingly appropriate surgery with satisfactory intra-operative appearance can result in recurrence. Ascertaining the etiology of recurrent hallux valgus can be difficult. Several factors must be considered when evaluating the deformity which has reoccurred. Efforts to discover the cause of the reappearing deformity may be aided by dividing the recurrences into three types. Type I consists of those deformities in which structural correction was never obtained. These under-corrections are usually the easiest to evaluate. In this type of "recurrence" the increased intermetatarsal angle and/or hallux abductus angle was never adequately repaired. Type II recurrences include those deformities which appeared satisfactorily corrected intra-operatively but recurred shortly after the surgery. Finally, type III recurrences are comprised of those deformities which for one reason or another, insidiously recur after a substantial period of time. Treatment may then be based on the type of recurrence and should be aimed at alleviating the deforming force.

CONSIDERATIONS IN REVISIONAL HALLUX VALGUS REPAIR

Iatrogenic deformities may complicate the typical hallux valgus deformity. Many times significant bone loss or angular deformities of the first metatarsal or the proximal phalanx will govern the surgical decision making process.

Each individual case of recurrent hallux valgus is unique and challenging. The surgeon performing the revision must be able to objectively evaluate the recurrent deformity. At times objectivity can be difficult if the surgical failure is one's own. Therefore, it may be wise for the surgeon to seek the opinion of a peer to insure rational decision-making evolves in the patient's best interest. Realistic expectations on the part of the surgeon and the patient should delineate not only the means of surgical intervention but also the extent

to which conservative methods should be exhausted.

Some important generalizations can be made on the nature of hallux valgus revisional surgery. Probably the most important point to be made is that if the increased intermetatarsal angle has not been addressed satisfactorily in the first attempted repair, it must be addressed in the revision. The method used to decrease the intermetatarsal angle will vary depending on the case scenario. The approach may only require soft tissue release, however, on many occasions first metatarsal osteotomy (not proximal phalangeal osteotomy) will be necessary.

A second important point to be made is that avascular necrosis is more likely to occur following a revisional distal metaphyseal osteotomy. If there is significant concern with regard to avascular necrosis a period of non-weightbearing may be judicious.

Finally, associated deformities, such as pes valgus, should be considered and addressed during the revision. This will decrease the patient's chances of requiring an additional procedure on the same foot.

RISK MANAGEMENT CONCERNS

Patients requiring revision of any surgical procedure respond best to the physician who is honest, and shows the proper concern. These two factors are extremely important in preventing disintegration of the patient-physician relationship.