8:51 – 8:56 am

My Evolution in Correcting Bunions and Why
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The hospital I was trained started with foot and ankle surgery in 1974. In this period the Keller-Brandes procedure was the solution for any type of Hallux valgus and Hallux rigidus. A small series of basal closing wedge osteotomies was performed in 80 patients (109 feet) until 1985. This procedure was abandoned in 1986 when the experienced surgeon left the department and was then replaced by the Kramer Osteotomy with percutaneous wire fixation. In 1991 the classic Chevron osteotomy was introduced to the department. By mistake in 1992 the surgeons started to combine a lateral soft tissue release through a second dorsal incision and without any type of fixation. The results of the above described techniques were reviewed in 1993 and 1994. The study on the basal closing wedge osteotomies revealed that this procedure was technically demanding, and shortening of the first ray and sagittal plain malalignment were common pitfalls. Although radiographical results were excellent, shortening and malalignment excluded this technique from further inclusion in our Hallux valgus treatment algorithm.

The 53 patients after classic Austin and 80 patients after modified Austin with lateral soft tissue release were each analyzed patients with Grade III sesamoid position were compared. The results revealed that the Austin technique with lateral soft tissue release was the more reliable technique, statistically better
AOFAS scores were achieved and radiographic results were improved. Nevertheless without fixation there was a number of slipped metatarsal heads.
In 1994 the crescentic proximal metatarsal Osteotomy was added to our Hallux valgus algorithm for severe metatarsus primus varus and a pin fixation for the Austin Osteotomy became mandatory.

A series of long term results after Keller Brandes revealed that the Keller’s arthroplasty contain many problems and a relatively high frequency of dissatisfaction, so that it should be used only under very limited indications like very low demand and old patients.

A series comparing 41 patients (53 feet) after Kramer and 53 patients (66 feet) after Austin osteotomy, for correction of mild and moderate hallux valgus with a minimum follow up of 2 years lead to the conclusion that the Austin osteotomy is more stable, more predictable, and produces more reliable results.

Since the proximal crescentic metatarsal Osteotomy seemed to be quite technically demanding we reviewed the results and realized that there was a high percentage of first metatarsal elevation. In 1999 based on these clinical studies the algorithm of Hallux valgus deformity was modified.

The Austin Osteotomy with lateral soft tissue release was the technique for the mild and moderate Hallux valgus deformity, the Ludloff technique was used for the moderate to severe Hallux valgus deformity.

Today after reviewing a series of Ludloff osteotomies we use the following algorithm for correction of Hallux valgus deformity:

Chevron osteotomy with screw fixation for mild Hallux valgus deformity, Chevron with lateral soft tissue release and screw fixation for moderate Hallux valgus deformity. Severe Hallux valgus deformities are treated by the SCARF Osteotomy and extreme Hallux valgus deformities are the indication for either a Ludloff or a Lapidus Osteotomy.

It is important to regularly review the own results and if necessary to adapt the treatment algorithm

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**8:57 – 9:02 am**

**Don’t Tell Ted, I Occasionally Venture Away from the Lapidus**

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**Why do I stray?**
- Not all bunions are created equal
  - Spectrum of deformity and “disease”. Like most anything in orthopedics one should have the ability to individualize treatment and be comfortable with different techniques
- There are “issues” with Lapidus
  - Non-union percentage is higher than any other bunion procedure
  - Not all bunions need a sledgehammer.
  - Can be technically demanding

**When do I stray?**
- Not all bunions are created equal
  - Minor deformities do well with a modified distal procedure
    - Early return to full WB
    - Early ROM
    - Very seldom though that a simple McBride will suffice as a single procedure. If McBride is your preferred technique you either do a lot of unnecessary bunion surgeries or your failure rate will be very high
  - Moderate deformities with minimal or moderate tarsometatarsal instability will do fine with a shaft osteotomy
    - Scarf or surgeons preference
- Non-union risk higher than normal
  - Patient can’t be non WB for whatever reason/s
  - Osteopenia
  - Obesity
  - Bilateral. (can do bilateral distal procedures in one sitting, but non-union rate too high if done with Lapidus)
  - Medical issues