Akin osteotomy as an adjunct to hallux MTPJ fusion

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We have no potential conflicts with this presentation.
Despite optimum positioning of hallux MTPJ during fusion, we noted that in some cases the hallux was still abutting the second toe.
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- This residual valgus following Hallux MTP fusion could be due to:
  - High hallux interphalangeus valgus angle
  - Eccentric wear leading to the lateral border of the proximal phalanx being concave and shorter than the medial border
- An Akin osteotomy can be used to address this problem.
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* **Method**
  * We used this technique in 16 patients between 2013 and 2016.
  * Joint was prepared with cup and cone reamers
  * Two 4.0mm cannulated partially threaded screws were used in a crossed configuration for holding the MTPJ
Methods

Akin osteotomy was performed in the mid to distal diaphyseal region of the proximal phalanx and stabilised with 8mm x 90 degree staple.

Postoperatively, a toe spica plaster cast with a heel weight bearing shoe was used for 6 weeks.
Results

* All hallux MTP joints fused
* All Akin osteotomies healed uneventfully
* We did not encounter any complications.
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* **Discussion**

* Residual phalangeal valgus is difficult to correct without positioning Hallux MTPJ in varus.

* Although the osteotomy was diaphyseal and not metaphyseal we have not seen delayed/ non-union.
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* **Discussion**
  * This technique has not been reported before
  * We accept that this technique may not be suitable when using plates and screws for MTPJ fusion, but would be suitable when using screws or staples
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* **Discussion:**
  * Akin osteotomy is commonly used as an adjunct to corrective hallux valgus surgery.

  * It is a relatively quick and reproducible technique with no additional incisions necessary.

  * We suggest that this technique be considered when carrying out a hallux MTPJ fusion to correct any residual phalangeal valgus, although may not be required in all cases.