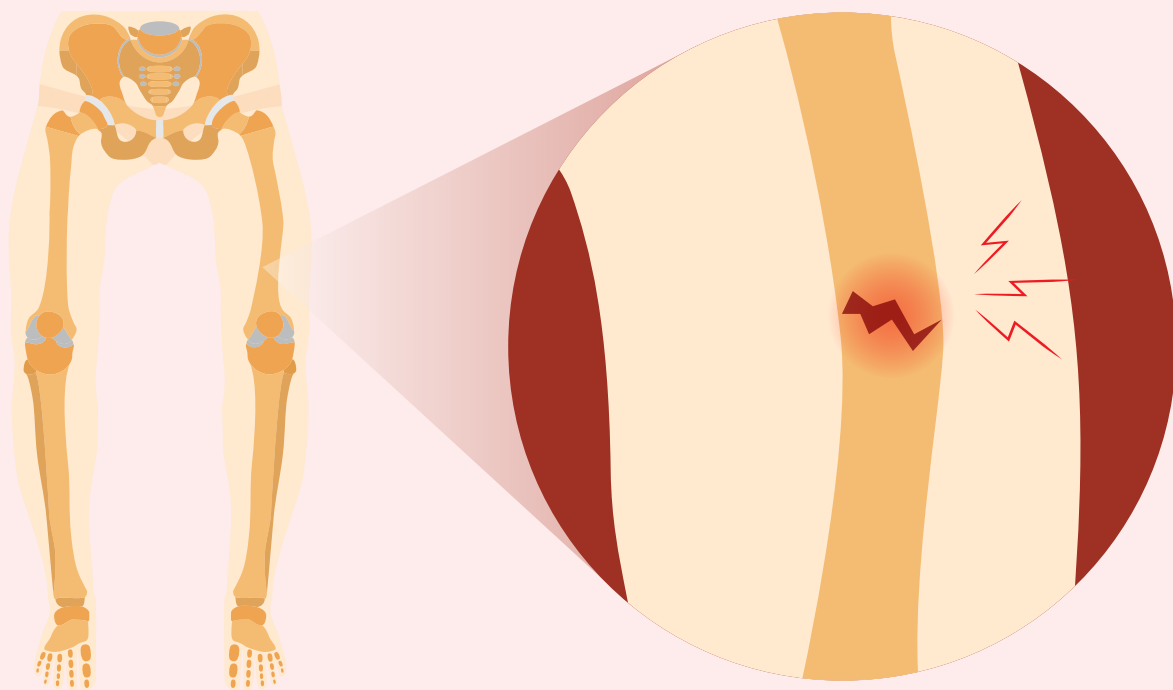


Effect of Femoral Curvature Correction on Outcomes Following the Treatment of Atypical Femoral Fractures

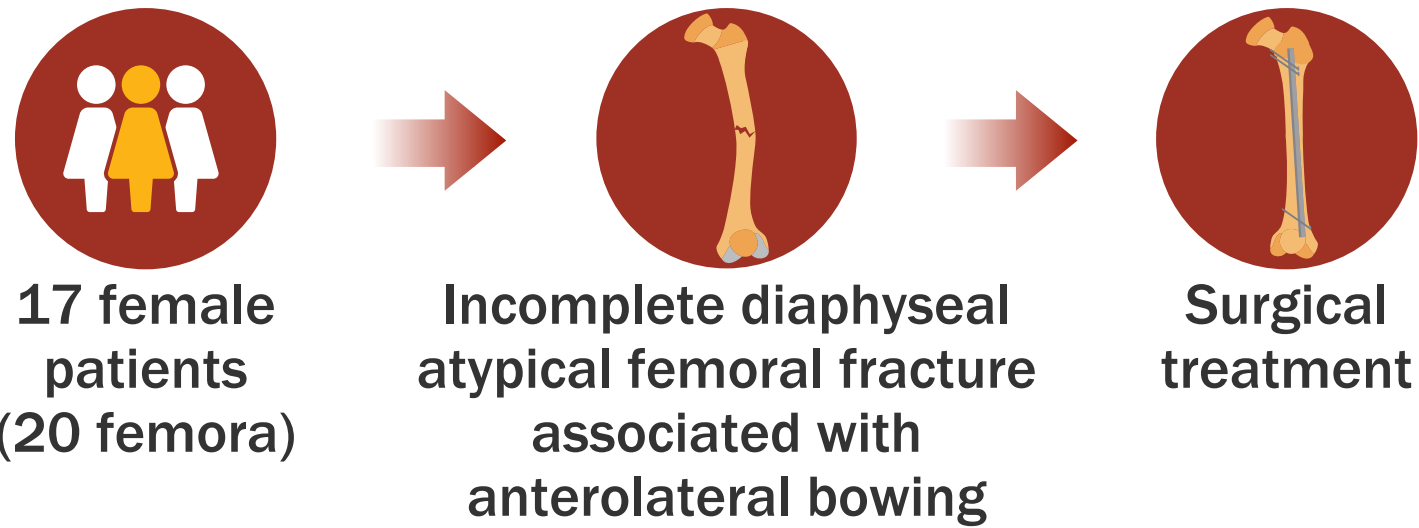
Increased anterolateral bowing of the femur increases the risk and magnitude of atypical femoral fractures



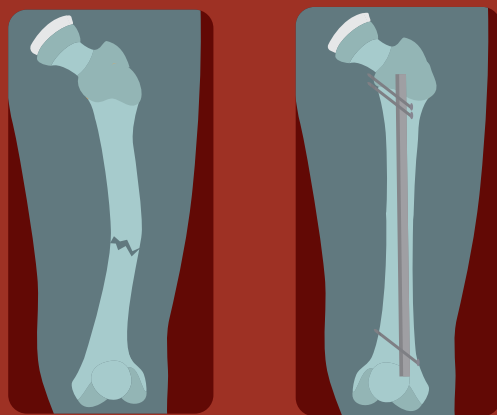
This may lead to complications following intramedullary (IM) nailing, which is used to surgically treat such fractures

Study assesses the effect of correcting femoral curvature, using an osteotomy, on the healing of atypical fractures

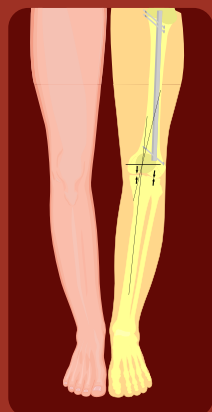
Minimally invasive osteotomy and reconstruction combined with IM nailing



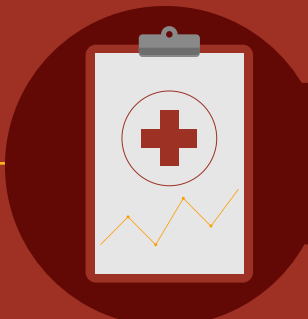
Assessment of:



Preoperative and postoperative radiographic features



Postoperative improvements in curvature



Outcomes

- ✓ Lateral bowing angle improved from 12.0° to 3.3°
- ✓ Anterior bowing angle improved from 17.3° to 11.5°
- ✓ Lateral distal femoral angle improved from 93.5° to 88.8°
- Primary union 19/20 femora
- Time to union 24.9 weeks
- Complications: Delayed union in 2 cases (36 weeks and 40 weeks)



Corrective osteotomy in combination with IM nailing promotes the healing of incomplete atypical femoral fractures associated with increased anterolateral bowing by reducing lateral tensile stress

Incomplete Diaphyseal Atypical Femoral Fracture due to Increased Anterolateral Bowing: Treatment with Corrective Osteotomy and Intramedullary Nailing with Augmented Plate Fixation

Yoon et al. (2022) | DOI: 10.2106/JBJS.22.00363

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