



**PediPlates®
I-Plate & O-Plate
Surgical Technique**

O-Plate

Shown actual size



12 mm



16 mm



20 mm



24 mm

I-Plate

Shown actual size



16 mm



22 mm



32 mm

PediPlates®

DO NOT DISTRIBUTE

I-Plate & O-Plate

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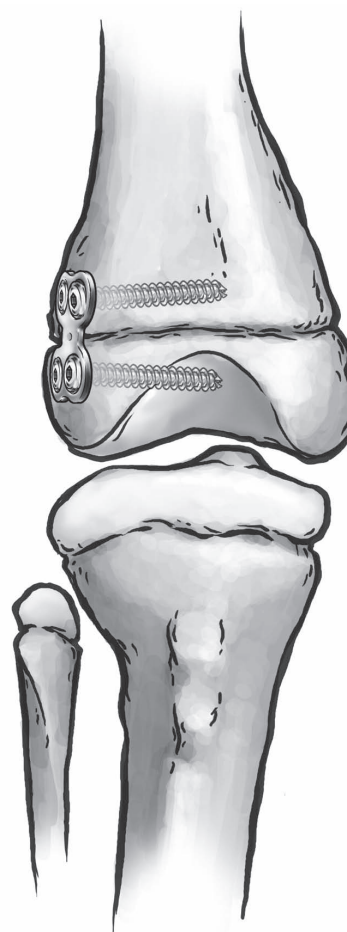
Limb deformities in children are relatively common and occasionally require surgical treatment. Techniques that take advantage of open growth plates are unique and allow for gradual correction with significantly less morbidity than osteotomy.

The concept of physeal tethering has been successful for many years. Physeal stapling has largely been replaced by newer devices such as the I-Plate and O-Plate which are stronger, lower profile, simpler and safer to use. The goal of the I-Plate and O-Plate is to produce gradual deformity correction by a temporary growth plate tether on one side (medial or lateral, etc.) while the opposite side continues to grow. This results in gradual deformity correction. The I-Plate or O-Plate is then removed once the correction is achieved, permitting continued growth.

The indications for the I-Plate and O-Plate include the gradual correction of most pediatric deformities with healthy growth plates and adequate growth remaining. Genu varum and valgum are common, as well as, genu recurvatum and ankle valgus. Essentially, any angular deformity with growth remaining can be considered for gradual correction with this technique.

Features and Benefits

- Stainless Steel Plates and Screws provide greater strength, resistance to breakage, as well as ease of removal
- Multiple plate sizes and configurations offer greater options intraoperatively
- All screws are self-tapping for easy insertion
- Utilizes 4.5 Stainless Steel Cannulated Screws with multiple screw length options
- Low-profile Plates
- The I-Plate more adequately addresses larger and heavier patients by providing additional fixation options

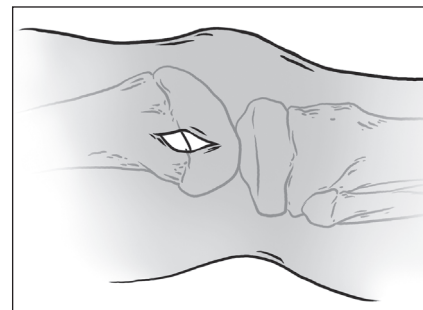


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Surgical Technique

(Shown using I-Plate)

1. Identify and locate the physis with C-Arm and mark your incision location. Make a small incision over the mark. (Figure 1)



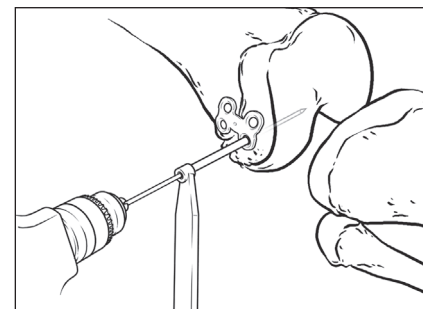
(Figure 1)

2. Select one of the three sizes (16mm, 22mm, 32mm) offered and position the plate centered about the physis. Once positioned, confirm its position radiographically. (Figure 2)



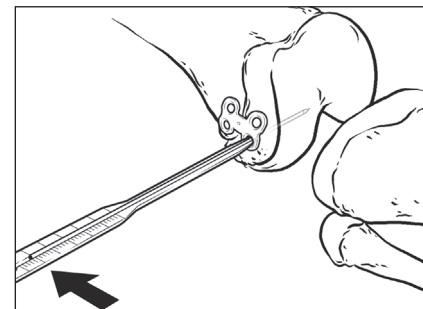
(Figure 2)

3. Insert the appropriate guide wires and measure for screw lengths. (Figure 3 and 4)

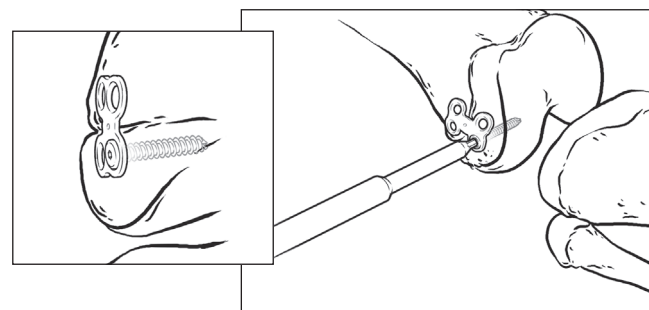
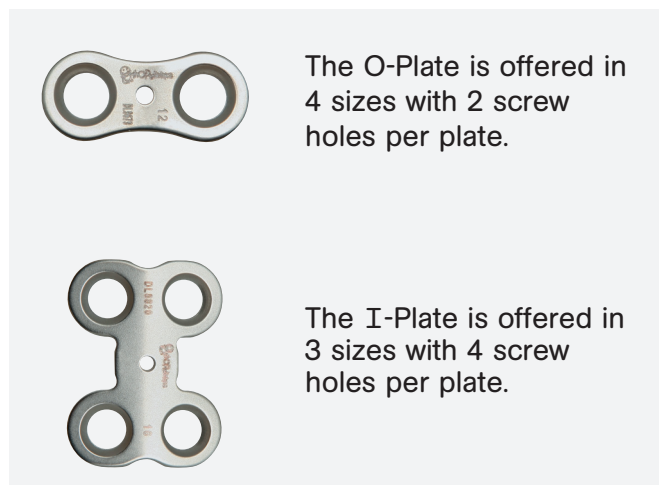


(Figure 3)

4. Insert selected 4.5mm Cannulated screws. Fluoroscopy should be used to confirm proper screw location in both epiphysis and metaphysis. (Figure 5)



(Figure 4)



(Figure 5)

NOTE: This technique has been provided by one of our medical advisors only as guidance and it is not intended to limit the methods used by trained and experienced surgeons.

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Catalog

4.5 mm Cannulated Screws

Stainless Steel, Fully Threaded

Catalog Number	Screw Length
00-1015-316	16mm
00-1015-320	20mm
00-1015-324	24mm
00-1015-328	28mm
00-1015-332	32mm
00-1015-336	36mm



PediPlates® I-Plate

Stainless Steel

Catalog Number	Plate Size
00-1015-416	16mm
00-1015-422	22mm
00-1015-432	32mm



PediPlates® O-Plate

Stainless Steel

Catalog Number	Plate Size
00-1012-212	12mm
00-1012-216	16mm
00-1012-220	20mm
00-1012-224	24mm



PediPlates® Instrument Set

(01-1010-601, PediPlates® II Complete Case – Implants, Instruments and Case)

Instruments	Catalog Number
Double Drill Guide	01-1010-010
Direct Measuring Device	01-1030-009
Mini IN-line ratchet with Small AO push/pull coupling	01-1030-001
3.5 Hex Screwdriver, AO fitting Cannulated	01-1010-006
3.5 Hex Screwdriver, AO fitting	01-1010-014
1.60 mm Guide Wire	01-1010-007
AO 3.2mm Cannulated Drill	01-1010-009
Bending Iron, Right	01-1010-002
Bending Iron, Left	01-1010-013
1.70mm Cleaning Brush	01-1010-003
Cleaning Stylet	01-1010-004
MiniT-Handle	01-1010-001
Self holding screw forceps	01-1030-007
Depth Gauge	01-1010-012
Sterilization Case	01-1010-602
Self-Centering Ball Tip Double Drill Guide	09-1010-010
Other PediPlate® Instruments Available – For Use With H-Plate Only	
2.5 Hex Screwdriver, AO fitting	01-1010-005
AO 2.5mm Drill	01-1010-008
Drill Guide	01-1010-011



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I and O PediPlates® Surgical Technique

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