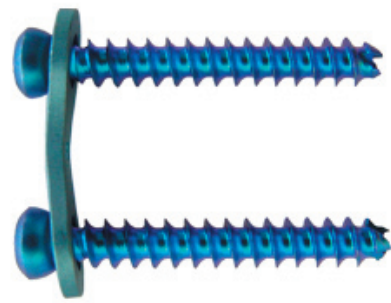


# Guided Growth for Angular Correction

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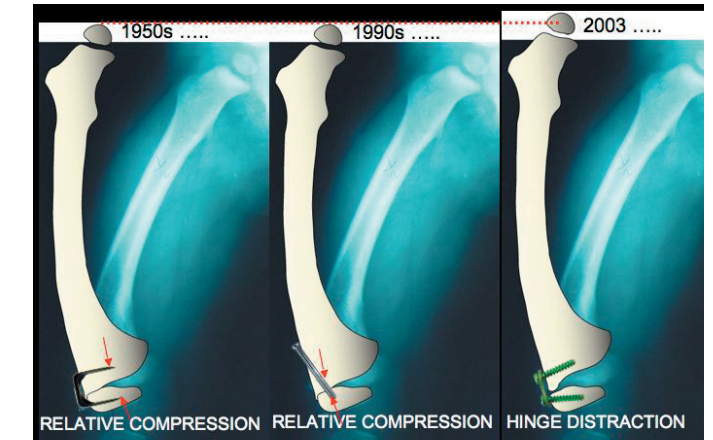
## QUESTIONS :

- Is hemi-epiphysiodeses using a plate safe, reliable, and reversible?
- What are the age criteria?
- For which diagnoses is this method applicable?

## PRELIMINARY SERIES: (implanted 4/04-4/05) IRB APPROVED

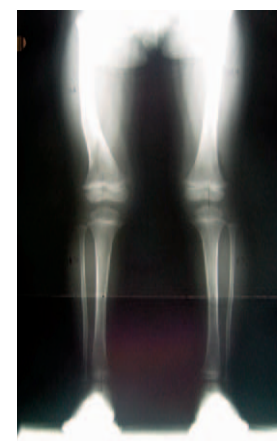
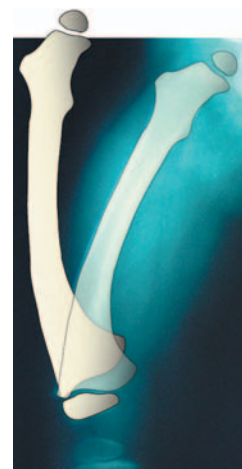
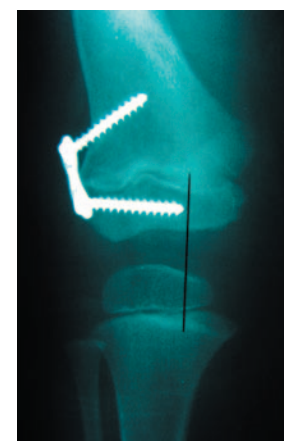
- N = 34 patients with genu varum / valgum
- Age 19 mos. – 17 years
- Duration plate(s) = 6 – 18 mos
- Size 14 kg. – 150 kg.
- N = 65 segmental deformities

	Extra-physeal	Flexible	Ease of removal
	0	X	X
	X	X	0
	0	0	0



DIAGNOSIS:	# PATIENTS(34)	# DEFORMITIES(65)	DEFORMITY CORRECTED:
• Idiopathic	20	43	• Full 26/34 patients – plate(s) removed @ average of 11 months
• Skeletal dysplasia	2	8	• Pending 8/34 patients – awaiting further correction /c growth
• Blount's	4	4	• Anticipated osteotomies 1/34 adolescent Blount's /c minimal correction
• Limb deficiency	3	5	• "Rebound"? repeat plating will depend upon further growth / follow-up
• Trauma	3	2	
• Rickets	1	2	
• Other	1	1	

## 19 month old – Femoral Dysplasia



3/04 – Plate inserted

2/05 – Plate removed

10/05

## CONCLUSIONS: Hemi-epiphysiodeses with a plate

- Is safe, reliable, and reversible
- Permits deformity correction at or near the CORA(s)
- Directional control may be frontal, saggital, or oblique
- Addresses multi-focal and bilateral deformities simultaneously
- Is applicable for any age group and any diagnosis
- The extraphyseal 8-plate = tension band (one per physis)
- These patients might otherwise have had 64 osteotomies....  
the safety, comfort and cost / benefit ratio clearly favor the 8-plate