

Bern Hip Symposium, Pre-Course 2026



What to do: Pincer-impingement

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STRATEGY

- How to analyze acetabular coverage
- Identify characteristics of overcoverage
- Plan for correction



ANALYSIS

- Orientation (Version)
- Coverage



ORIENTATION

- ACETABULAR INDEX 0 – 13°
- ACETABULAR ANTEVERSION
- LINES MEET CRANIALLY
- ANTERIOR WALL (DOTTED) LIES MEDIAL TO THE POSTERIOR WALL (SOLID)



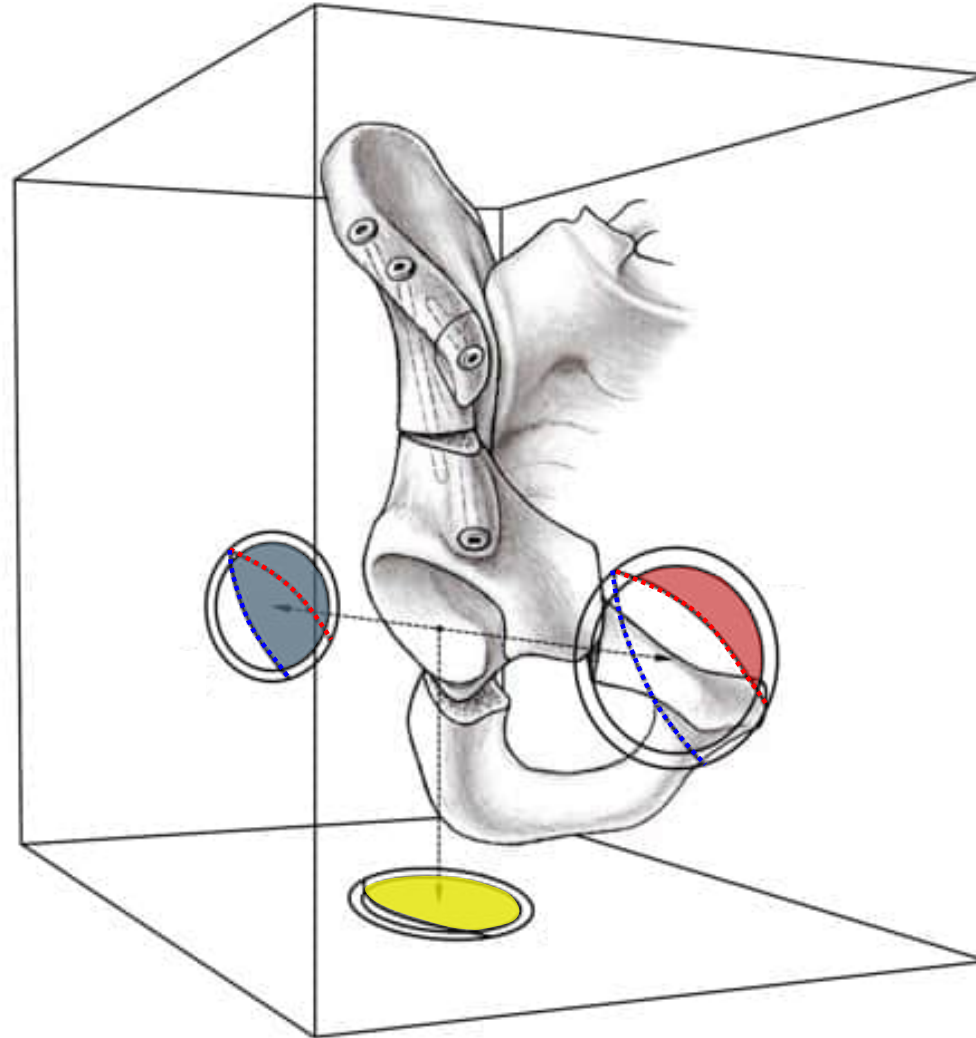
COVERAGE

LATERAL-CENTER-EDGE (LCE) ANGLE: **25** – 30°

EXTRUSION INDEX: 15 - 25%

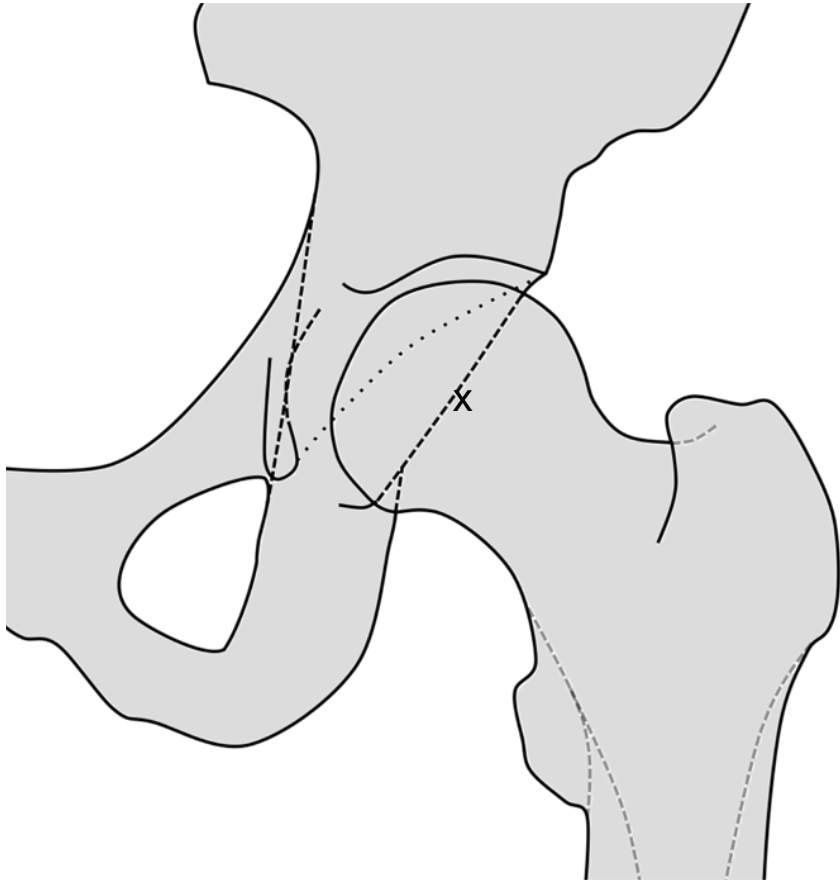


QUANTIFICATION



Tannast et al, JOR

ACETABULAR WALL INDEX

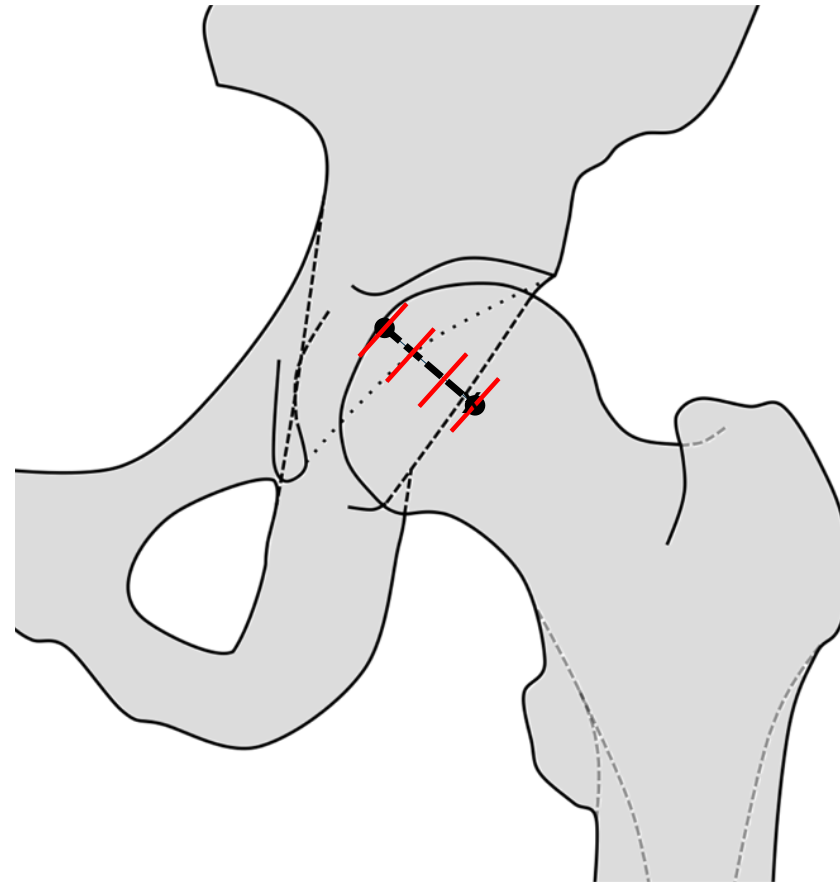


Siebenrock et al, CORR 2012

ACETABULAR WALL INDEX

Anterior Wall:

Junction between medial and
middle third of the radius

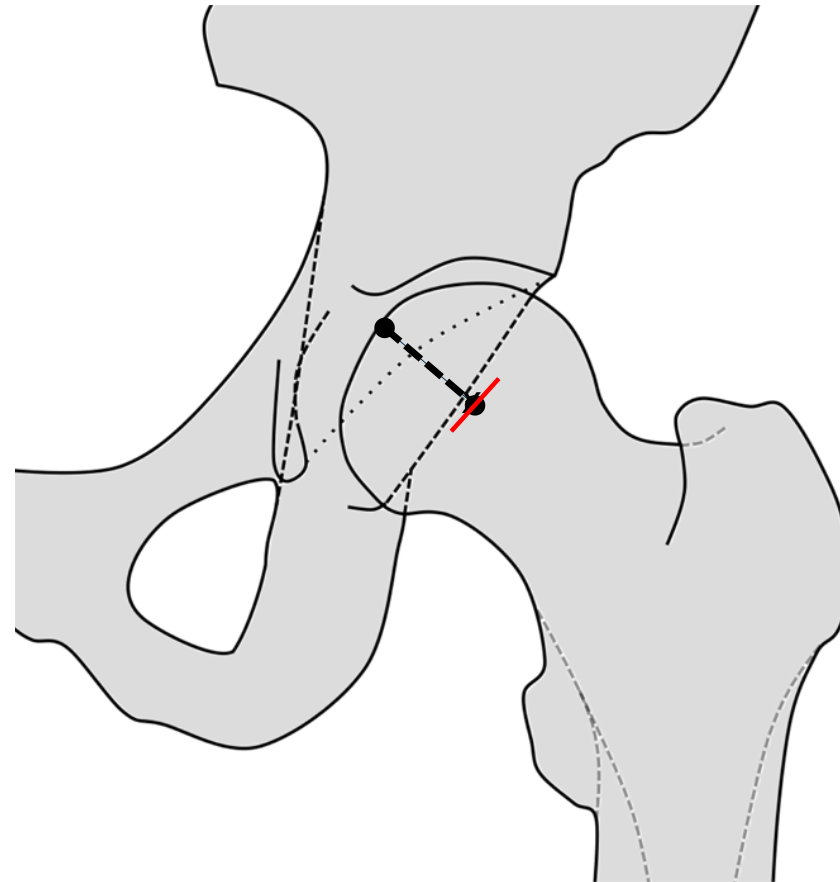


Siebenrock et al, CORR 2012

ACETABULAR WALL INDEX

Posterior Wall:

Just medial to femoral head center



Siebenrock et al, CORR 2012

STRATEGY

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Acetabular Overcoverage

Global

Segmental

Profunda /
Protrusio

PROTRUSIO

Version



LCE



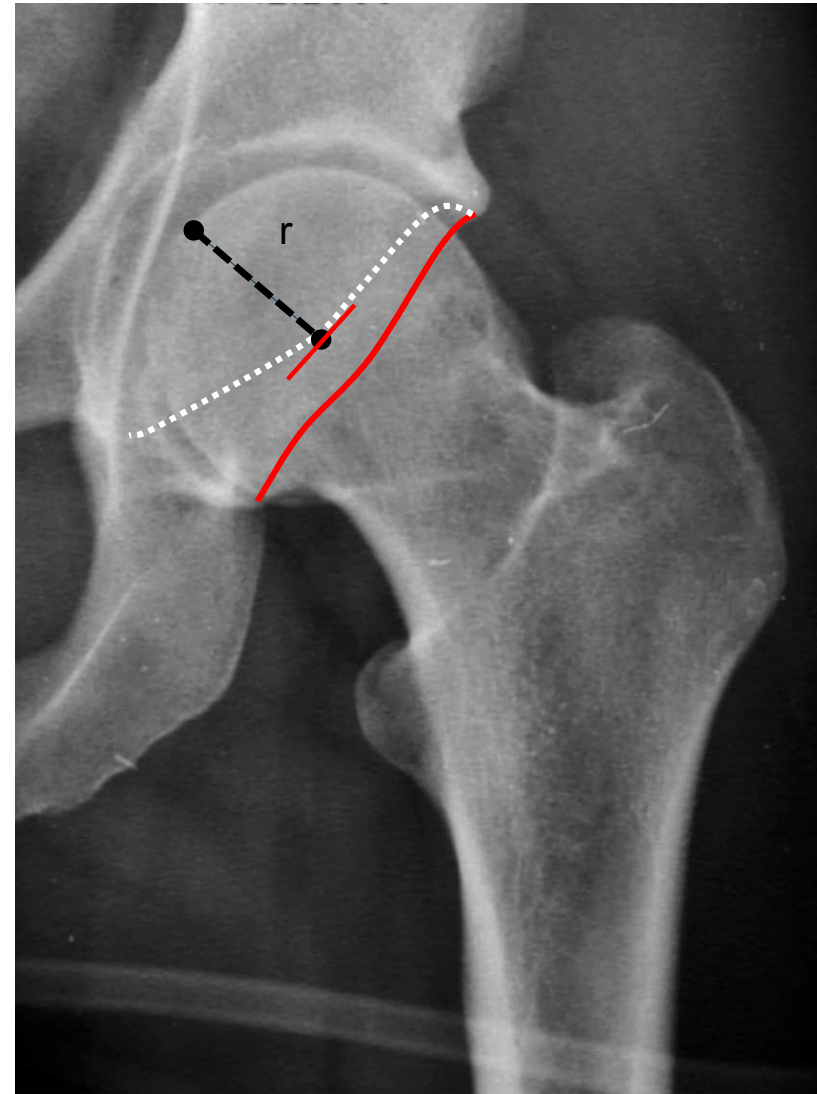
Extrusion



Anterior Wall



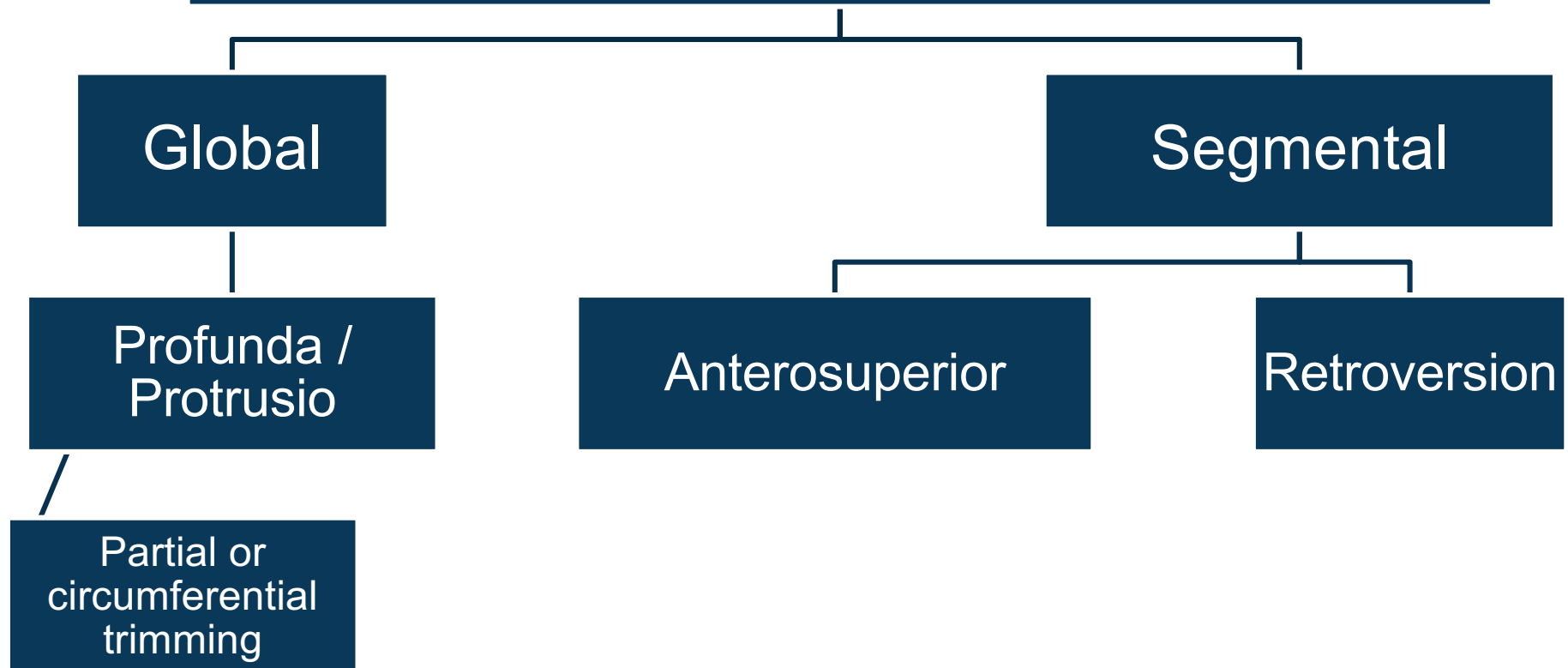
Posterior Wall



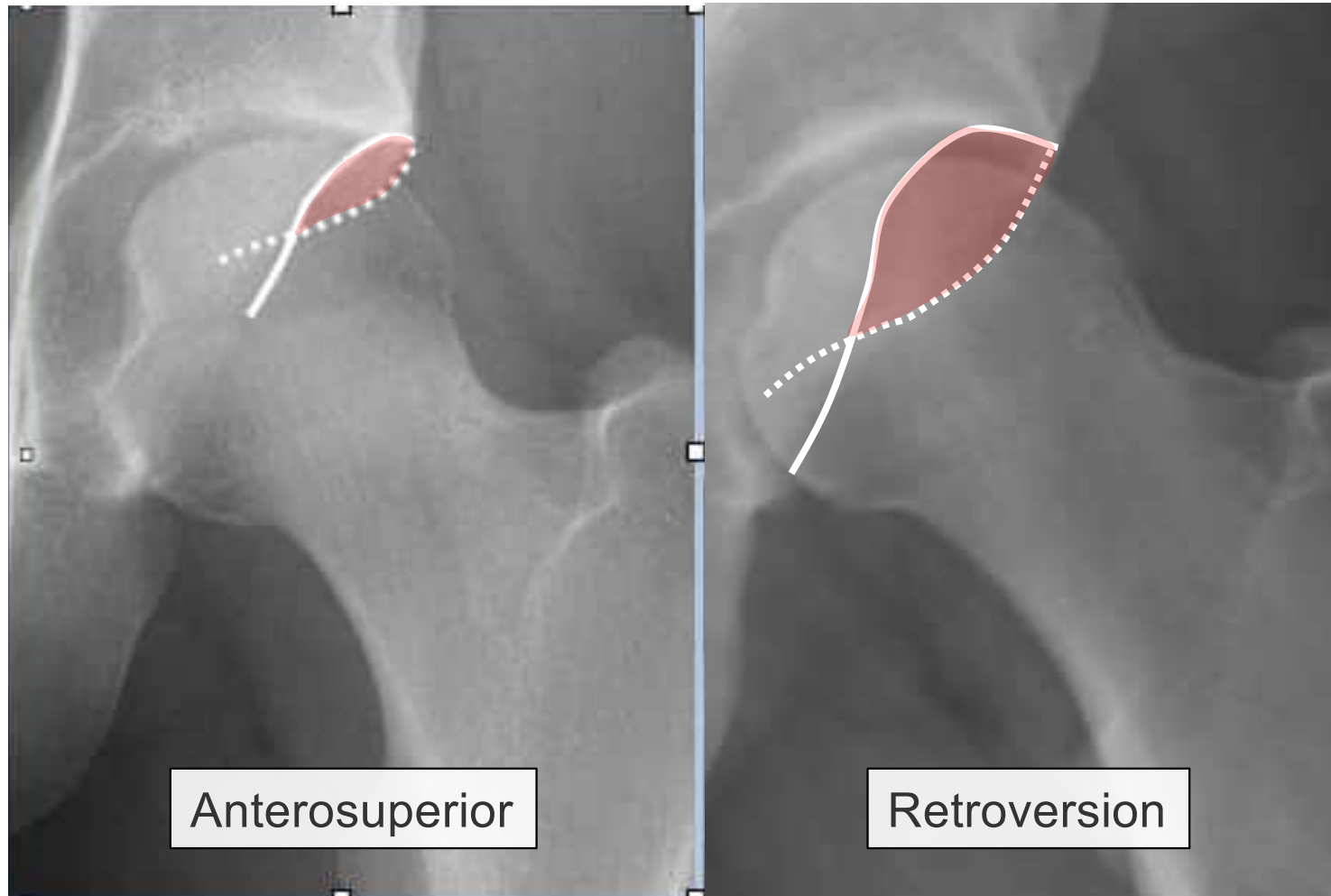
CIRCUMFERENTIAL TRIMMING



Acetabular Overcoverage



SEGMENTAL OVERCOVERAGE



Anterosuperior

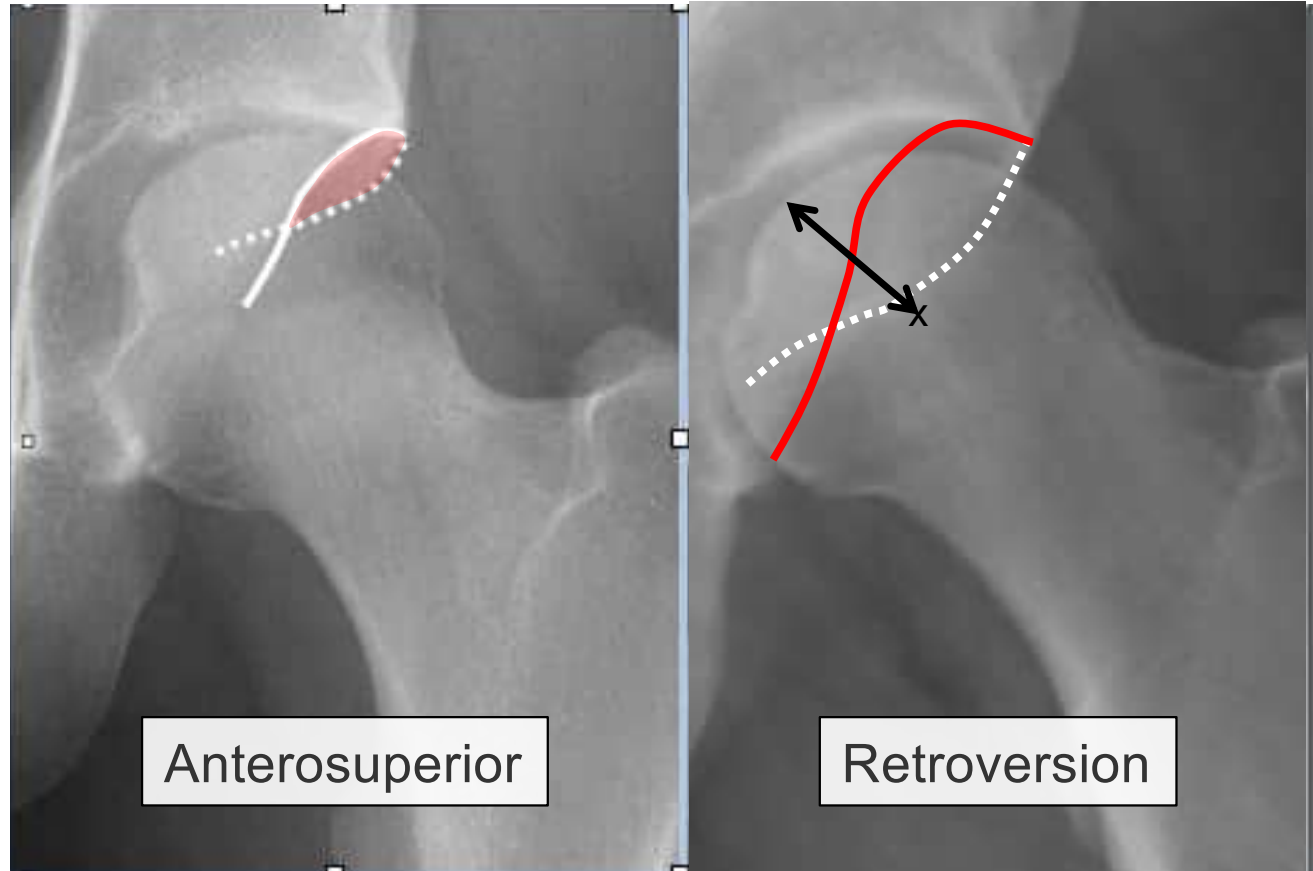
Retroversion

SEGMENTAL OVERCOVERAGE

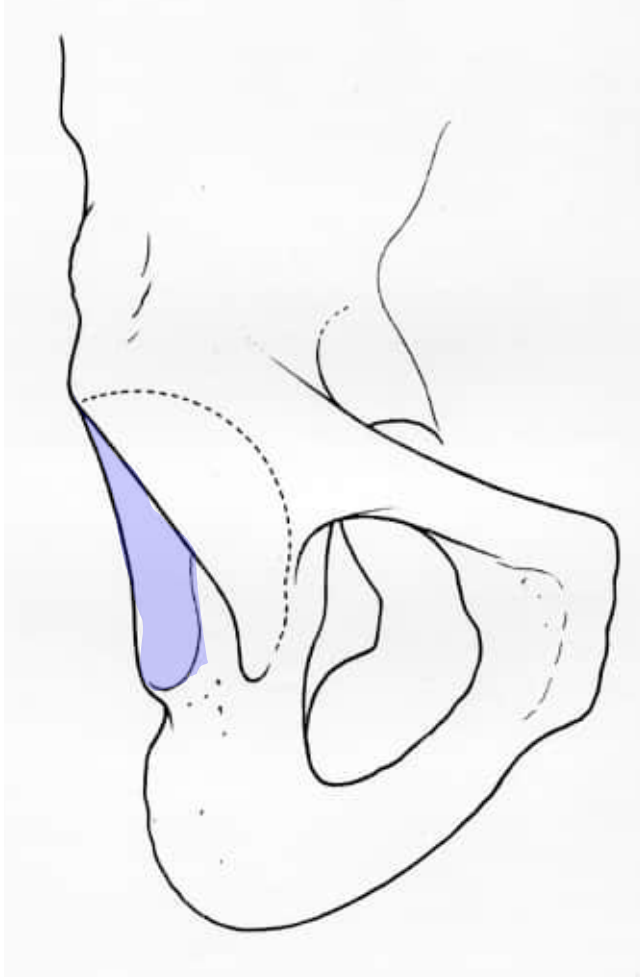
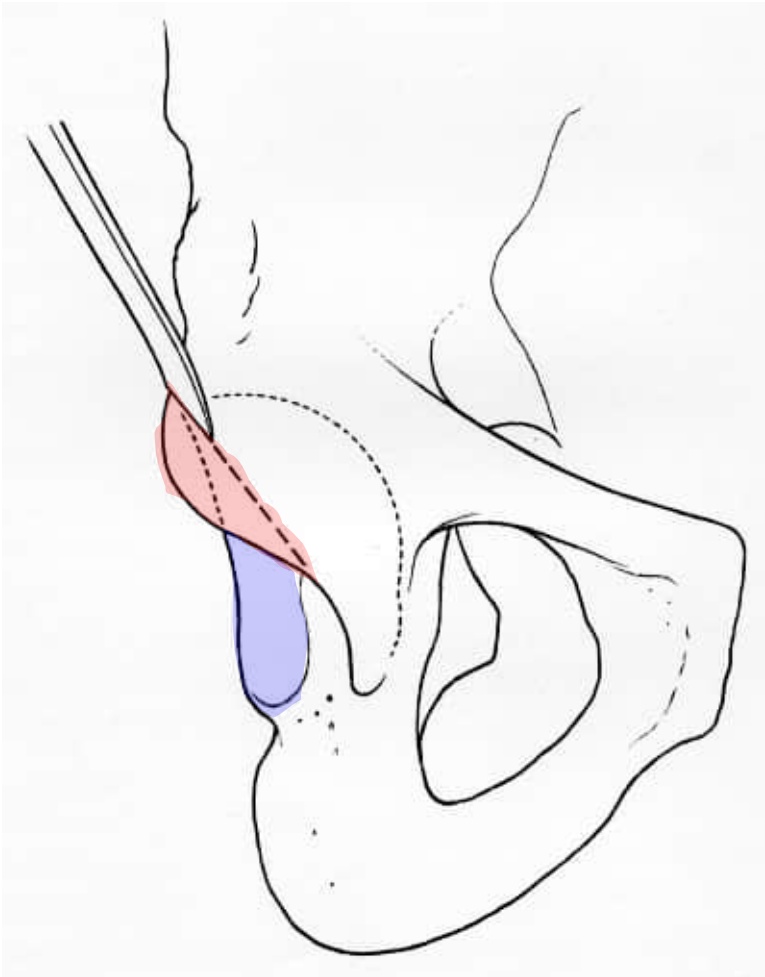
Retroversion Index > 33%

Anterior Wall too lateral

Posterior Wall deficient

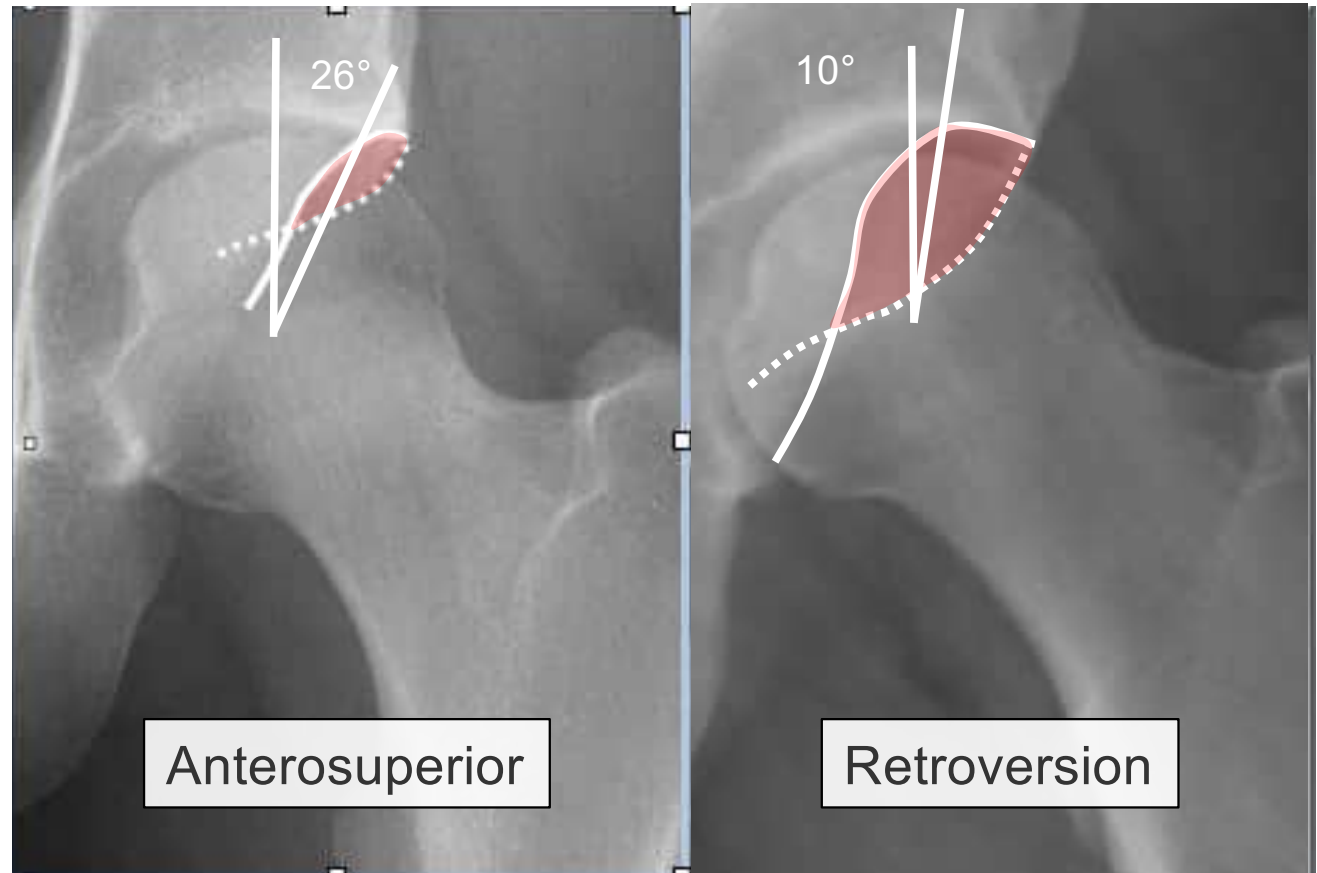


ACETABULAR RIM TRIM



SEGMENTAL OVERCOVERAGE

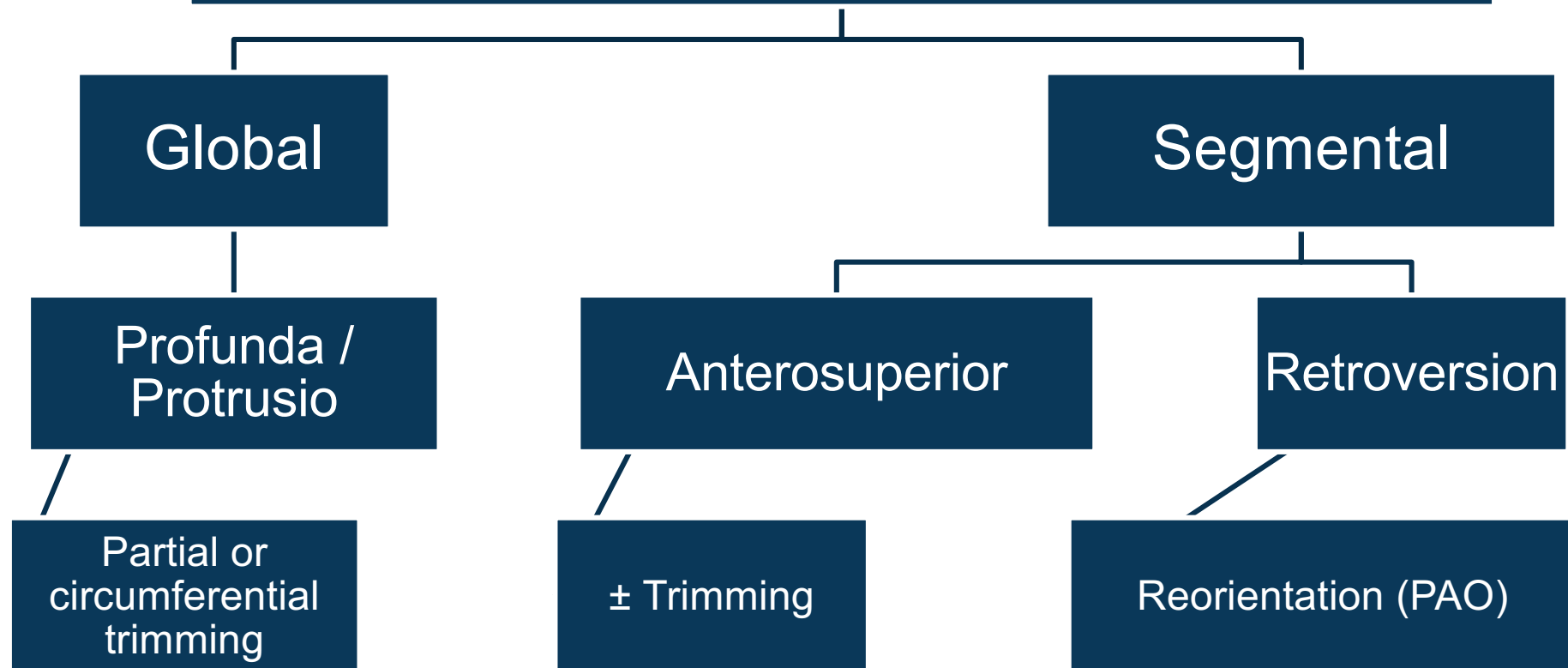
LCE Angle change



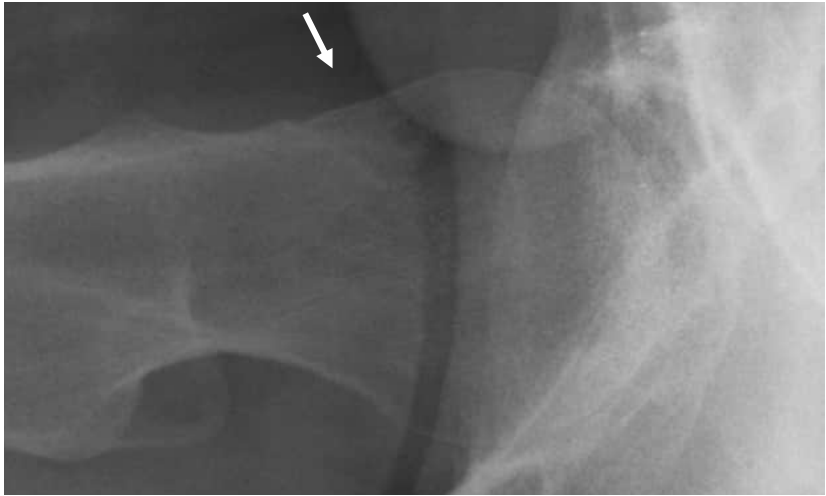
STRATEGY

- How to analyze acetabular coverage
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Acetabular Overcoverage



COMBINED FAI – 32-YEAR-OLD MALE



COMBINED FAI – 32-YEAR-OLD MALE



RIM TRIMMING

Trim to LCE Angle 28°

5mm = 5°

Provides good ant/post wall balance



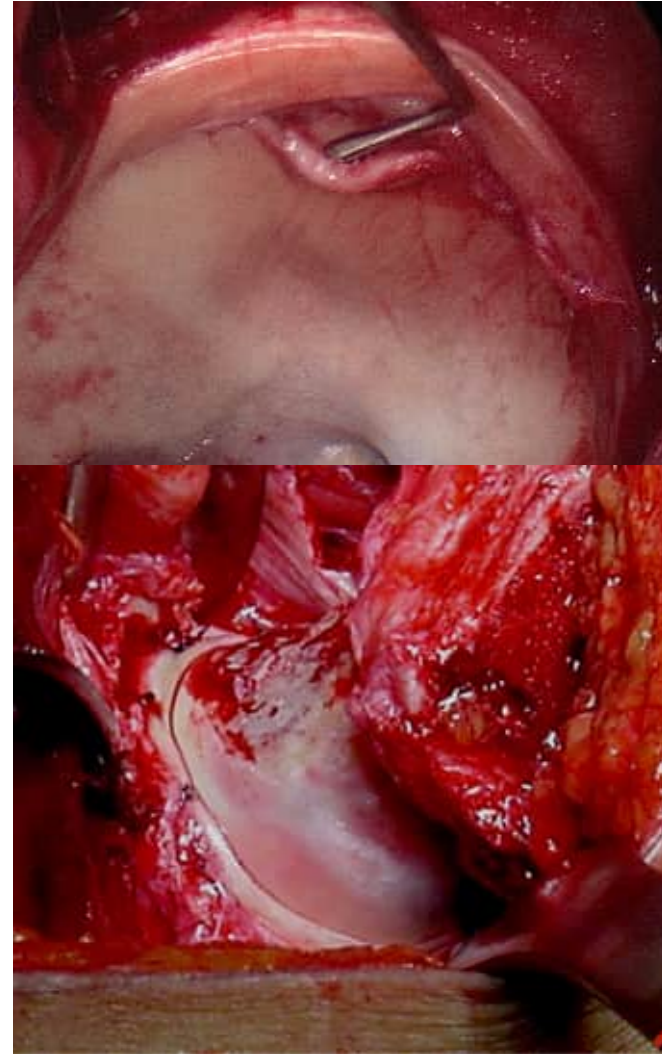
RIM TRIMMING – ORDER OF OPERATIONS

Offset correction first

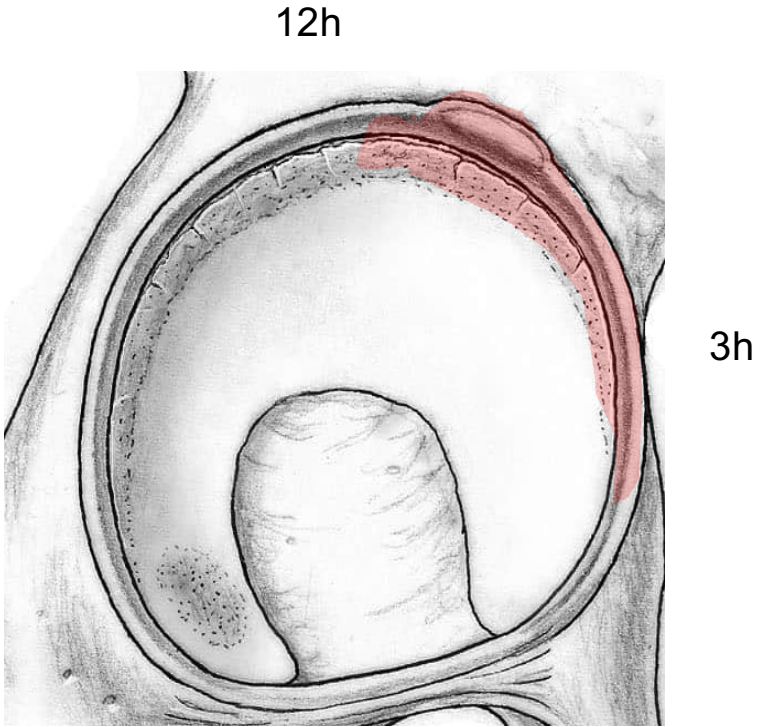
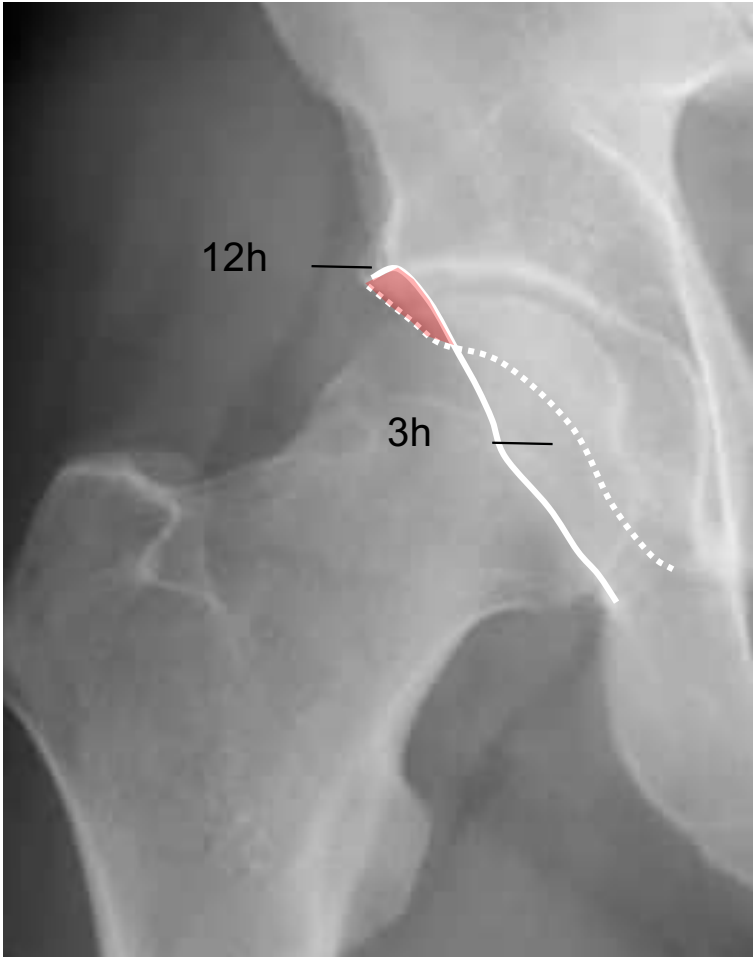
Acetabular resection after reviewing cartilage damage

No rim trim when IR > 30°

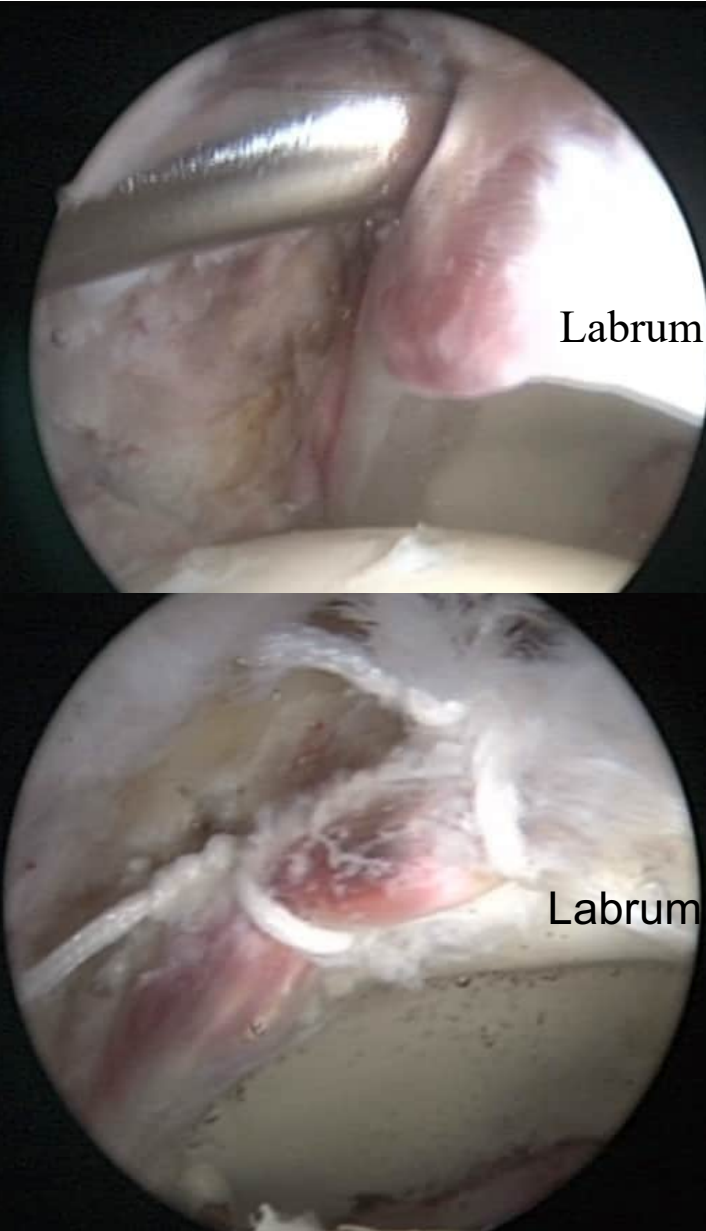
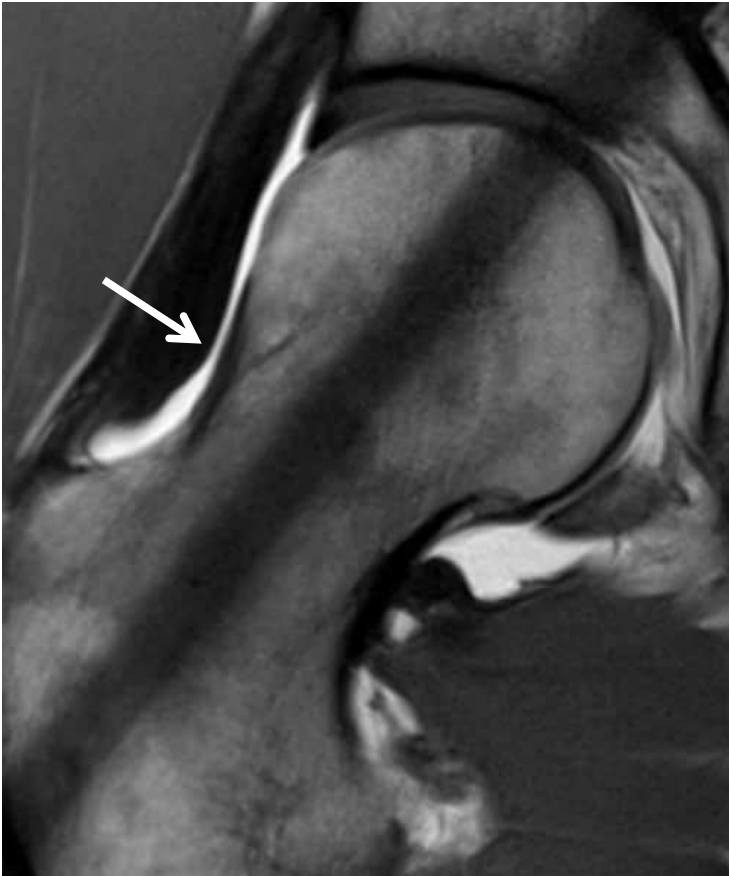
Often no rim trimming necessary



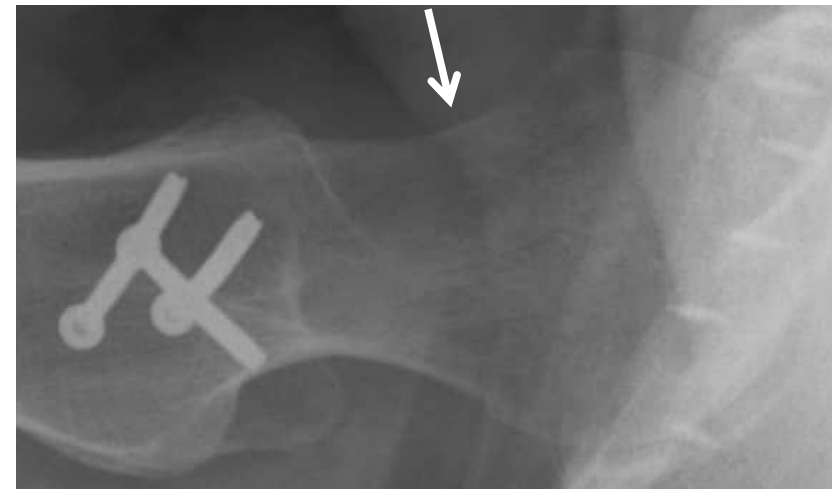
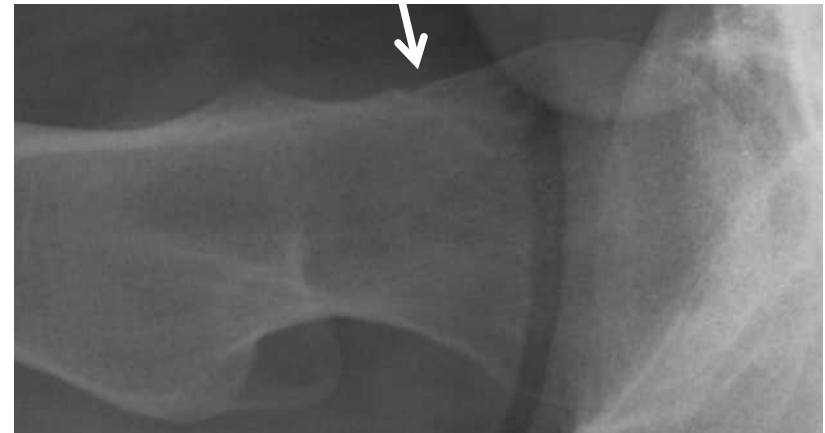
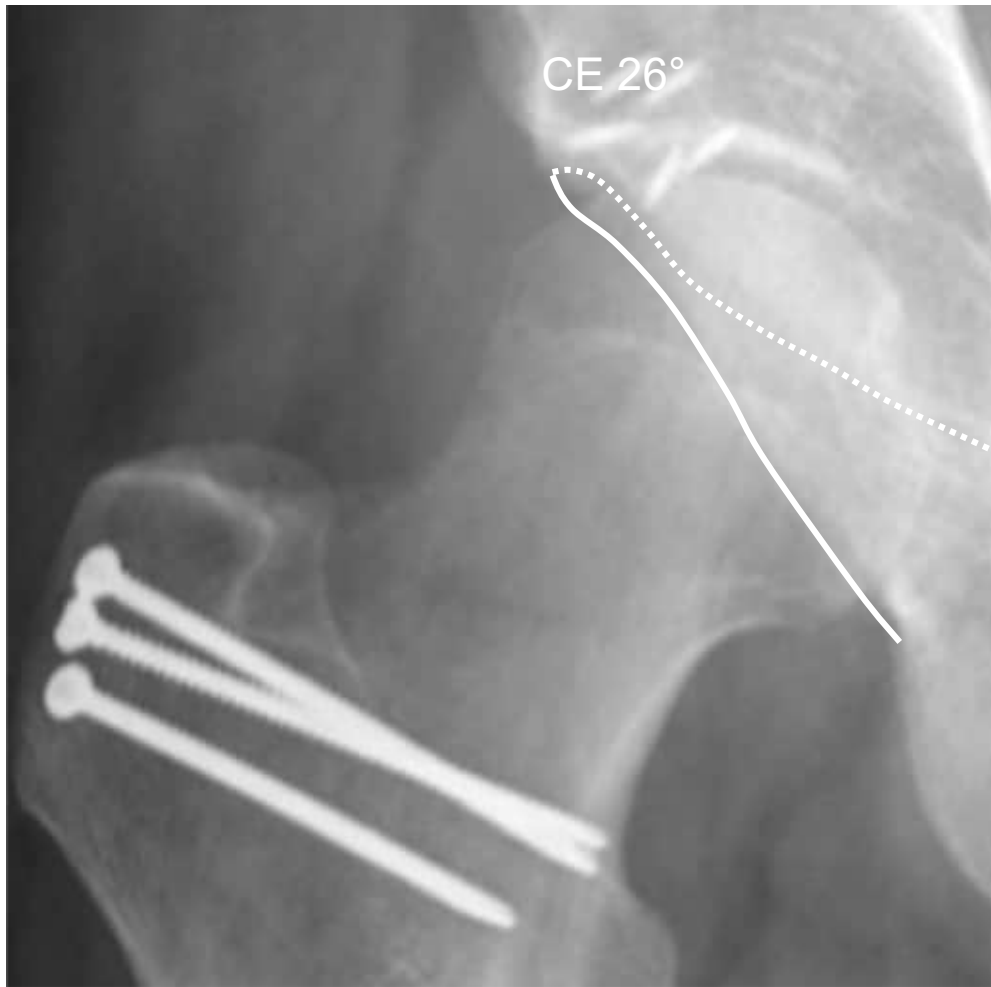
ACETABULAR RESECTION FROM 12H-2H



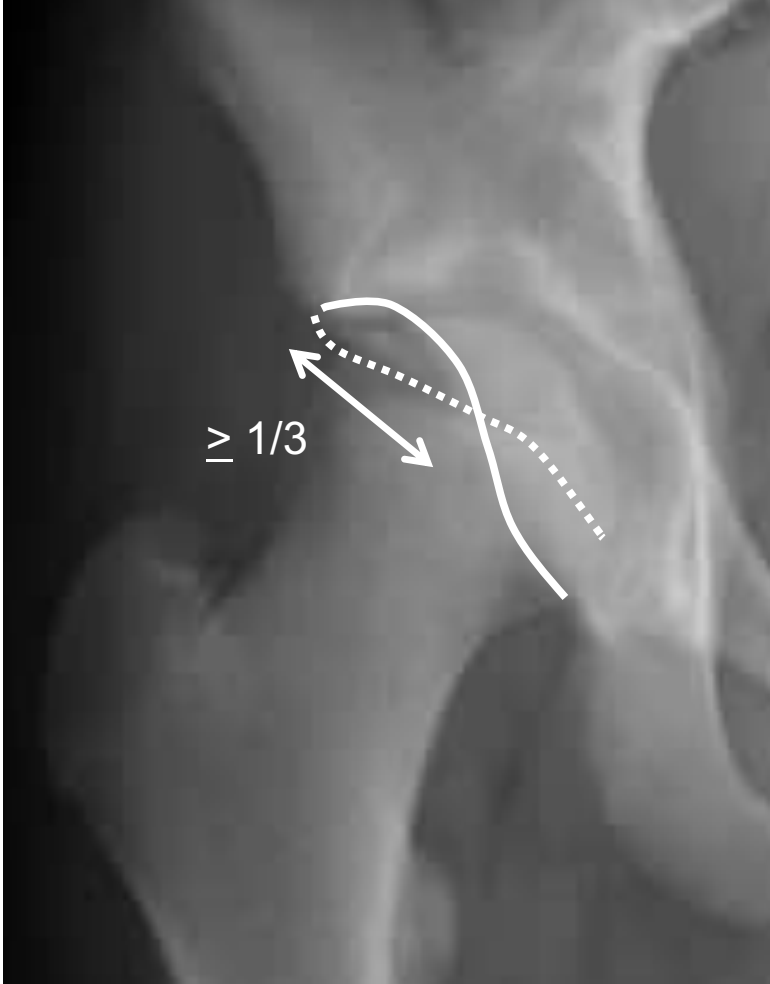
ARTHROSCOPIC OR OPEN



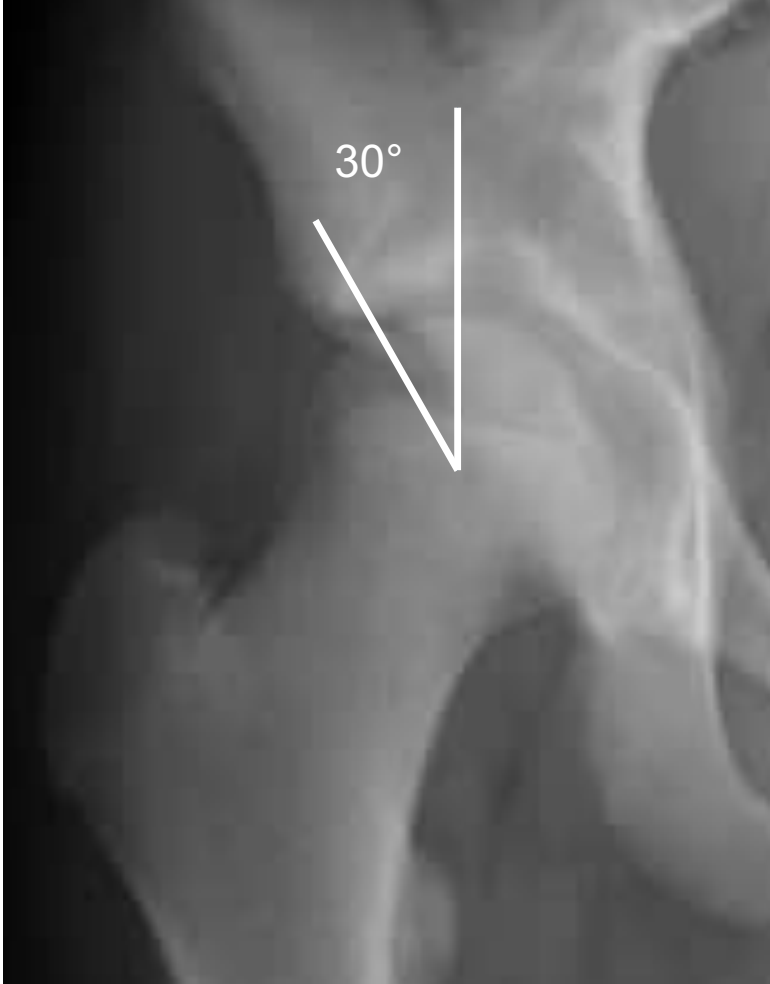
COMBINED OFFSET CORRECTION AND RIM TRIMMING



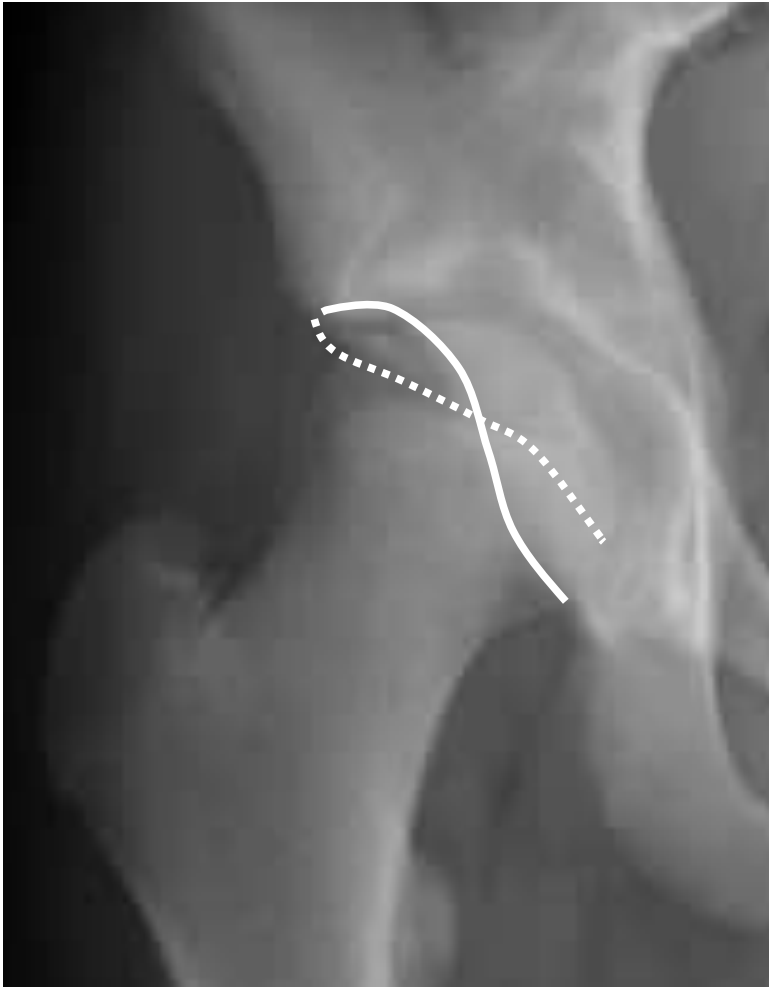
ACETABULAR RETROVERSION – 22-YEAR-OLD MALE



ACETABULAR RETROVERSION – 22-YEAR-OLD MALE



ANTEVERTING PERIACETABULAR OSTEOTOMY



TREATMENT OF OVERCOVERAGE

- **Acetabular Rim Trim**

- Anterosuperior (focal or segmental) overcoverage
 - Substantial focal cartilage damage
 - IR < 30° despite adequate offset correction
- Circumferential (global)

Open, Scope

Open

- **Reorientation**

- Substantial acetabular retroversion
 - Anteverting PAO

Open

QUESTIONS?